Order on

True up for FY 2018-19
Annual Performance Review for
FY 2019-20
&
ARR for FY 2020-21
Uttarakhand Power Corporation Ltd.

April 18, 2020

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Vidyut Niyamak Bhawan,

Near I.S.B.T., P.O. Majra, Dehradun – 248171

Table of Contents

1. Background and Procedural History....4

2. Stakeholders'Objections/Suggestions, Petitioner's Responses and Commission's Views 8

2.1 General....8

2.1.1 Compliance to Regulations/ Directions of Commission....8

2.2 Overall Tariff Increase....9

2.3 Domestic Tariff....12

2.4 Non-Domestic Tariff....14

2.5 Agriculture Allied Activities....16

2.6 Industrial Tariff....18

2.6.1 Tariff Hike....18

2.7 Load Factor based Tariff....21

2.8 Frequent Amendment in Tariff....22

2.9 Fuel Charge Adjustment....23

2.10 Voltage wise Cost of supply....24

2.11 Billable Demand....25

2.12 Distribution Losses....26

2.13 Delayed Payment Surcharge....29

2.14 Continuous Supply Surcharge....30

2.15 Rebate and Incentives....32

2.16 Open Access....33

2.17 Promotion of Renewable Energy....35

2.18 Power Procurement Plan....36

2.19 Capital Expenditure and Capitalization....38

2.20 Other Expenses....40

2.21 Return on Equity....40

2.22 Arrears....41

2.23 Collection Efficiency....42

2.24 Metering and Billing Efficiency....43

2.25 Provision for Bad & Doubtful Debts....45

2.26 Tariff Structure....46

2.27 Department Employees and Pensioners *47*
2.28 Consumer Security Deposit *49*
2.29 Change of Supply Voltage on Marginal Load Enhancement by consumers *50*
2.30 Law Cells *51*
2.31 CGRF *52*
2.32 Provision of Subsidy *52*
2.33 KCC Data *53*
2.34 Tariff for Cane Crusher *54*
2.35 Theft and Provision of Street Lighting *54*
2.36 New Connections *56*
2.36.1 Stakeholder's Comments 56
2.37 Others *57*
2.38 Views of State Advisory Committee *58*
3. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing Up for FY 2018-19 .... **63**
3.1 Truing-up for FY 2018-19 .... *63*
3.1.1 Sales 64
3.1.2 Distribution Losses 80
3.1.3 Power Purchase Expenses (Including Transmission Charges) 82
3.1.4 Operation and Maintenance (O&M) Expenses 83
3.2 Cost of Assets and Financing *94*
3.2.1 Capital cost of Original Assets 94
3.2.2 Financing of Capital Cost 97
3.2.3 Provisions for Bad and Doubtful Debts 101
3.2.4 Interest on Working Capital (IoWC) 104
3.2.5 Return on Equity 107
3.2.6 Non-Tariff Income 108
3.3 Tariff Revenue *108*
3.4 Sharing of Gains and Losses *111*
3.5 ARR and Revenue for FY 2018-19 .... *113*
4. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2019-20 and ARR for FY 2020-21 .... **115**
4.1 Background *115*

4.2 Sales *117*
4.3 Distribution Loss Trajectory *122*
4.4 Aggregate Revenue Requirement *123*
4.5 Power Purchase Cost *124*
4.5.1 Power Purchase from UJVN Ltd. 128
4.5.2 Power Purchase from NHPC Ltd. 129
4.5.3 Power Purchase from THDC India Ltd. 130
4.5.4 Power Purchase from NTPC Ltd 131
4.5.5 Power Purchase from SJVN Ltd. 132
4.5.6 Power Purchase from NPCIL Stations 133
4.5.7 Power Purchase from Renewable Energy Sources 133
4.5.8 Power Purchase from Vishnu Prayag HEP and GVK Srinagar (State Royalty Power) 133
4.5.9 Power Purchase from Sasan UMPP 134
4.5.10 Power purchase from State Gas Generating Station 134
4.5.11 Power purchase from Greenko Budhil Hyrdo 135
4.5.12 Power purchase from upcoming generating stations 135
4.5.13 Energy available from Firm Sources 136
4.5.14 Power Purchase for fulfilling RPO 137
4.5.15 Deficit/(Surplus) Energy 138
4.5.16 Cost of Power Purchase 139
4.6 Transmission Charges *147*
4.6.1 Inter-State Transmission Charges Payable to PGCIL 147
4.6.2 Intra-State Transmission Charges payable to PTCUL 148
4.7 Water tax *148*
4.8 GFA and Additional Capitalisation *148*
4.8.1 GFA base for FY 2020-21 148
4.9 Means of Finance *152*
4.10 Interest and Finance Charges *152*
4.10.1 Depreciation 154
4.10.2 Operation and Maintenance expenses 156
4.10.3 Interest on Working Capital 167
4.10.4 Return on Equity 169
4.10.5 Income Tax 170
4.10.6 Provision for Bad and doubtful debts 170

4.10.7 Non-Tariff Income 171
4.10.8 Revenue Requirement for FY 2020-21 172
4.10.9 Revenue at Existing Tariff 172
4.10.10 Revenue Gap for FY 2020-21 at existing Tariff 173
5. Tariff Rationalisation, Tariff Design and Related Issues 174
5.1 Tariff Rationalisation and Tariff Design for FY 2020-21 174
5.1.1 General 174
5.1.2 Petitioner's Proposals 174
5.1.3 Commission's Views on Tariff Rationalisation Measures 179
5.1.4 Treatment of Revenue Gap 199
5.1.5 Cross Subsidy 199
5.1.6 Category-wise Tariff Design 199
5.1.7 RTS-1: Domestic Tariff 200
5.1.8 RTS-2: Non-Domestic Tariff 201
5.1.9 RTS-3: Government Public Utilities 202
5.1.10 RTS-4: Private Tube Wells/Pump Sets and Agriculture Allied Activities 203
5.1.11 RTS-5: Industry 203
5.1.12 RTS-6: Mixed Load 204
5.1.13 RTS-7: Railway Traction 205
5.1.14 RTS-8: Electric Vehicle Charging Stations 205
5.2 Revenue for FY 2020-21 205
5.3 Cross Subsidy 206
5.4 Open Access Charges 208
6. Review of Commercial Performance of UPCL 212
6.1 General 212
6.1.1 Consumer Mix during FY 2017-18 & FY 2018-19 214
6.1.2 Consumption Pattern during FY 2017-18 & FY 2018-19 215
6.1.3 Revenue Pattern during FY 2017-18 & FY 2018-19 217
6.2 Commission's Analysis and Directions on Commercial Performances 218
6.2.1 Metering 220
6.2.2 Billing 224
6.2.3 Bill Collection System 234
6.3 Energy Audit 239
6.4 AT&C Losses 240

6.5 Commission's Analysis and Directions on Financial Performance *245*
6.5.1 Liquidity Ratio 245
6.5.2 Solvency Ratio 250
6.5.3 Profitability Ratio 251
6.5.4 Operating or Activity Ratio 253
6.5.5 Efficiency Ratio 256
6.5.6 Conclusion 259
7. Commission's Directives 261
7.1 Compliance to the Directives Issued in MYT Order for FY 2019-20 to FY 2021-22 dated February 27, 2019 ...... *261*
7.1.1 Performance Report 261
7.1.2 Sales 262
7.1.3 Load Shedding 262
7.1.4 AT&C Losses 263
7.1.5 Power Purchase Quantum and Cost 264
7.1.6 Fixed Assets Register 264
7.1.7 Bad &Doubtful Debts 265
7.1.8 Reliability Indices 266
7.1.9 Voltage wise Cost of Supply 267
7.1.10 Demand Side Management Measures 268
7.1.11 Deficit/Surplus Power 268
7.1.12 Status of NA/NR, IDF/ADF/RDF 269
7.1.13 Replacement of Improper, Non-Functional, Stop/Stuck up defective or IDF Meters 270
7.1.14 Replacement of Mechanical Meters 271
7.1.15 NB & SB Cases 271
7.1.16 Outstanding Arrears 272
7.1.17 Status of KCC Consumers 273
7.1.18 Status of Revenue realisation per unit sold 273
7.1.19 Billing and Collection System 274
7.1.20 Departmental Employees 276
7.1.21 Location of Installation of Meters 277
7.1.22 Bad Debt 277
7.1.23 Impact of VII Pay Commission 278
7.1.24 Conductor Augmentation 278

7.1.25 Scrutiny of KCC Data 279
7.1.26 Collection Efficiency 280
7.1.27 Procurement of Deficit Energy 281
7.1.28 Depreciation 282
7.1.29 Details for changing the threshold level for applicability of kVAh based tariff for LT Industry and Non-Domestic Category 283
7.1.30 Energy Audit 283
7.1.31 Analysis of Current Liabilities 284
7.1.32 Average Collection Period and Collection Efficiency Ratio 284
7.1.33 Inventory Management 285
7.2 Fresh Directives 287
7.2.1 Voltage-wise Losses 287
7.2.2 Improvement of Metering and Billing System 287
7.2.3 Proposal for Consultancy Assignments 288
7.2.4 Capitalisation of Assets 288
7.2.5 Reconciliation of Grants 288
7.2.6 Open Access Charges 288
7.3 Conclusion 288
8. Annexures 290
8.1 Annexure 1: Rate Schedule Effective from 01.04.2020 290
8.2 Annexure 2: Schedule of Miscellaneous Charges 315
8.3 Annexure 3: Public Notice 316
8.4 Annexure 4: List of Respondents 318
8.5 Annexure 5: List of Participants in Public Hearings 321

List of Tables

Table 1.1: Publication of Notice....5

Table 1.2: Schedule of Hearings....5

Table 3.1: Break up of Sales submitted by the Petitioner for FY 2018-19 (MU)....64

Table 3.2: UPCL Divisions with Lower ABR for Domestic Category....68

Table 3.3: Excess Sales to be disallowed for Domestic Category (Except RTS 1.1)....69

Table 3.4: Excess Sales to be disallowed for Domestic Category (RTS1.1 – BPL/Lifeline)....69

Table 3.5: UPCL Divisions with Lower ABR for Non-Domestic Category....70

Table 3.6: Excess Sales to be disallowed for Non-Domestic Category....71

Table 3.7: UPCL Divisions with Lower ABR for RTS 4 Category....72

Table 3.8: Excess Sales to be disallowed for PTW Category....72

Table 3.9: UPCL Divisions with Lower ABR for Government Irrigation System....73

Table 3.10: Excess Sales to be disallowed for GIS Category....74

Table 3.11: UPCL Divisions with Lower ABR for Public Water Works....75

Table 3.12: Excess Sales to be disallowed for Public Water Works Category....76

Table 3.13: UPCL Divisions with Lower ABR for LT Industry....77

Table 3.14: Excess Sales to be disallowed for LT Industry....77

Table 3.15: UPCL Divisions with Lower ABR for HT Industries....78

Table 3.16: Excess Sales to be disallowed for HT industry....78

Table 3.17: UPCL Divisions with Lower ABR for Mixed Load....79

Table 3.18: Excess Sales to be disallowed for Mixed Load....79

Table 3.19: Category-wise Sales for FY 2018-19 (MU)....80

Table 3.20: Assessed Distribution Losses for FY 2018-19 (MU)....81

Table 3.21: Power Purchase Cost approved in the Tariff Order Vs Actual Power Purchase Cost for FY 2018-19 (Rs. Crore)....82

Table 3.22: Power Purchase Cost claimed by UPCL and approved by the Commission for FY 2018-19 (Rs. Crore)....83

Table 3.23: Revised Employee Expenses as claimed by the Petitioner (Rs. Crore)....85

Table 3.24: Approved Employee Expenses for FY 2018-19 (Rs. Crore)....87

Table 3.25: Approved R&M Expenses for FY 2018-19 (Rs. Crore)....88

Table 3.26: Year on Year Increase in the Total Consultancy and Professional Charges (Rs. Crore)....91

Table 3.27: Expenses booked under A&G expenses (Rs. Crore) ... 92
Table 3.28: Normative A&G expenses for FY 2018-19 (Rs. Crore) ... 93
Table 3.29: Approved A&G expenses for FY 2018-19 (Rs. Crore) ... 93
Table 3.30: Approved O&M Expenses for FY 2018-19 (Rs. Crore) ... 94
Table 3.31: Assets base approved by the Commission (Rs. Crore) ... 95
Table 3.32: Pending Electrical Inspector Certificates (Rs. Crore) ... 95
Table 3.33: Assets base approved by the Commission (Rs. Crore) ... 97
Table 3.34: Means of Finance for FY 2018-19 as submitted by the Petitioner (Rs. Crore) ... 97
Table 3.35: Means of Finance as approved by the Commission for FY 2018-19 (Rs. Crore) ... 97
Table 3.36: Interest expense on capital loans as submitted by the Petitioner for FY 2018-19 (Rs. Crore) ... 98
Table 3.37: Interest and Finance Charges approved for FY 2018-19 (Rs. Crore) ... 100
Table 3.38: Depreciation approved for FY 2018-19 (Rs. Crore) ... 101
Table 3.39: Category wise Bad Debt written off as submitted by the Petitioner (Rs. Crore) ... 102
Table 3.40: Interest on Working Capital for FY 2018-19 (Rs. Crore) ... 105
Table 3.41: Monthwise position of Revenue Billed and Collected and interest paid on Overdraft and Rebate earned during FY 2018-19 ... 106
Table 3.42: Opening and closing equity for FY 2018-19 as submitted by the Petitioner (Rs. Crore) 107
Table 3.43: Return on Equity approved by the Commission for FY 2018-19 (Rs. Crore) ... 108
Table 3.44: Non-tariff Income approved by the Commission for FY 2018-19 (Rs. Crore) ... 108
Table 3.45: Additional Revenue from Sale for FY 2018-19 (Rs. Crore) ... 109
Table 3.46: Revenue for FY 2018-19 from Departmental Employees Corresponding to Assessed Sales ... 109
Table 3.47: Revenue from Sale of Power for FY 2018-19 (Rs. Crore) ... 110
Table 3.48: Additional Revenue from Sale due to inefficiency for FY 2018-19 (Rs. Crore) ... 111
Table 3.49: Sharing of Gains and Losses for FY 2018-19 claimed by the Petitioner (Rs. Crore) ... 111
Table 3.50: Sharing of Gains on Account of Controllable Factors approved by the Commission for FY 2018-19 (Rs. Crore) ... 113
Table 3.51: Summary of true up for FY 2018-19 approved by the Commission (Rs. Crore) ... 114
Table 4.1: Actual Energy Sales for consumer categories during FY 2013-14 to FY 2018-19 (MU) ... 117
Table 4.2: CAGR calculated for Energy Sales to each consumer category ... 119

Table 4.3: Sales projected by the Petitoner for FY 2020-21 (MU)..120
Table 4.4: Consumer Category wise sales approved by the Commission for FY 2020-21 (MU)........122
Table 4.5: Distribution Loss Trajectory approved by the Commission for the third Control Period from FY 2019-20 to FY 2021-22 122
Table 4.6: Distribution Losses approved for FY 2020-21 122
Table 4.7: Energy Input requirement approved by the Commission for FY 2020-21 123
Table 4.8: Power Purchase from UJVN Ltd. 128
Table 4.9: Summary of Energy Availability from UJVN Ltd. for FY 2020-21 (MU) 129
Table 4.10: Power Purchase from NHPC Ltd...129
Table 4.11: Energy Availability from NHPC Ltd. for FY 2020-21 (MU) 130
Table 4.12: Power Purchase from THDC India Ltd. 130
Table 4.13: Energy Availability at State periphery from THDC Ltd. for FY 2020-21 (MU)...............130
Table 4.14: Power Purchase from NTPC Ltd..131
Table 4.15: Energy Availability from NTPC Ltd. at State periphery for FY 2020-21 (MU) 132
Table 4.16: Power Purchase from SJVN Ltd. 132
Table 4.17: Energy Availability from SJVN Ltd. at State periphery for FY 2020-21 (MU).................132
Table 4.18: Energy Availability from NPCIL at State periphery for FY 2020-21 (MU) 133
Table 4.19: Energy Availability from Renewable Energy Sources for FY 2020-21 (MU) 133
Table 4.20: Energy Availability from Vishnu Prayag HEP at State Periphery (State Royalty Power) for FY 2020-21 (MU)...134
Table 4.21: Energy Availability from Sasan UMPP at State periphery for FY 2020-21 (MU)............134
Table 4.22: Energy Availability from State Gas Generating Stations at State periphery for FY 2020-21 (MU) 135
Table 4.23: Energy Availability from Greenko Budhil Hydro at State periphery for FY 2020-21 (MU) 135
Table 4.24: Energy Availability from Upcoming Stations at State periphery for FY 2020-21 (MU)..136
Table 4.25: Energy Availability from Firm Sources at State periphery for FY 2020-21 (MU) 136
Table 4.26: Additional Purchase for fulfilling RPO...137
Table 4.27: Energy deficit/surplus Scenario for FY 2020-21 (MU)..138
Table 4.28: Approach of the Commission in estimating the Cost of Power Purchase for FY 2020-21 142

Table 4.29: Summary of Power Purchase Cost for FY 2020-21 ... 143
Table 4.30: Quarterly Power Purchase approved by the Commission for FY 2020-21 ... 145
Table 4.31: Energy Charges of thermal generating stations for FY 2020-21 ... 147
Table 4.32: Transmission Charges for FY 2020-21 (Rs. Crore) ... 148
Table 4.33: Proposed Capital Expenditure and Capitalisation for FY 2019-20 and FY 2020-21 (Rs. Crore) ... 150
Table 4.34: Actual Gross GFA addition of UPCL (Rs. Crore) ... 151
Table 4.35: GFA base approved by the Commission for FY 2020-21 (Rs. Crore) ... 151
Table 4.36: Means of Finance approved by the Commission (Rs. Crore) ... 152
Table 4.37: Repayment Schedule for REC old loans (Rs. Crore) ... 152
Table 4.38: Interest on Loan approved by the Commission for FY 2020-21 (Rs. Crore) ... 154
Table 4.39: Depreciation approved for FY 2020-21 (Rs. Crore) ... 155
Table 4.40: Vacant Posts for which GoU approval has been received ... 158
Table 4.41: Vacant Posts for which approval of GoU is awaited. ... 159
Table 4.42: Details of recruitment carried out by the Petitioner ... 159
Table 4.43: Employee expenses approved by the Commission for the second Control Period for FY 2020-21 (Rs. Crore) ... 161
Table 4.44: R&M Expenses approved by the Commission for FY 2020-21 (Rs. Crore) ... 162
Table 4.45: Additonal Provisioning for Data Centre (Rs. Crore) ... 164
Table 4.46: A&G expenses approved by the Commission for FY 2020-21 (Rs. Crore) ... 166
Table 4.47: O&M Expenses approved by the Commission for FY 2020-21 (Rs. Crore) ... 166
Table 4.48: Interest on working capital approved by the Commission for FY 2020-21 (Rs. Crore) .. 169
Table 4.49: Return on Equity approved by the Commission for FY 2020-21 (Rs. Crore) ... 170
Table 4.50: Revenue Requirement approved by the Commission for FY 2020-21 (Rs. Crore) ... 172
Table 4.51: Revenue for FY 2020-21 at existing Tariff (Rs. Crore) ... 173
Table 4.52: Revenue Gap for FY 2020-21 (Rs. Crore) ... 173
Table 5.1: Tariff Proposed for BPL/Lifeline Consumers opting for Prepaid Metering ... 178
Table 5.2: Effective Tariff & Cross-subsidy for HT Industry having contracted load 1 MVA ... 191
Table 5.3: Effective Tariff & Cross-subsidy for HT Industry ... 195
Table 5.4: Tariff for Domestic Consumers ... 201
Table 5.5: Concessional Tariff for Snowbound Areas ... 201

Table 5.6: Tariff for Non Domestic 202
Table 5.7: Tariff for Government Public Utilities 202
Table 5.8: Tariff for Private tube Wells/ Pump Sets 203
Table 5.9: Tariff for LT Industry....204
Table 5.10: Existing, Proposed and Approved Tariff for HT Industries 204
Table 5.11: Tariff for Mixed Load 204
Table 5.12: Tariff for Railway Traction....205
Table 5.13: Tariff for Electric Vehicle Charging Stations 205
Table 5.14: Summary of Category Wise Projected Revenue at Approved Tariffs 205
Table 5.15: Cross Subsidy at Average Cost of Supply 206
Table 5.16: Cross Subsidy at Approved Tariffs in FY 2019-20 and FY 2020-21 207
Table 5.17: Wheeling Charges approved for FY 2020-21 209
Table 6.1: Detail of Substations (S/s) maintained by UPCL as on 31.12.2019 212
Table 6.2: Detail of Lines maintained by UPCL as on 31.12.2019....213
Table 6.3: Increase in Assets maintained by UPCL as on 31.12.2019 vis-a-vis 31.12.2018 213
Table 6.4: Quantum of Power Traded through Open Access (at NR periphery)....217
Table 6.5: Revised Formats prescribed by the Commission vide letter dated 27.11.2014....219
Table 6.6: Quarterly Target of IDF cases for FY 2019-20....221
Table 6.7: Status of Defective Meters (IDF) as on 31.12.2019 221
Table 6.8: Status of Defective Meters....222
Table 6.9: Status of Mechanical Meters 223
Table 6.10: Quarterly Target of NA/NR for FY 2019-20 submitted by UPCL in Format-2....225
Table 6.11: Status of NA/NR submitted in Commercial Performance Monitoring Report 225
Table 6.12: Status of Provisional Billing viz. NA/NR/IDF/ADF/RDF 226
Table 6.13: Status of NB/SB Cases....227
Table 6.14: Status of Outstanding Arrears....229
Table 6.15: Re-Conciliation of Pending Arrears submitted by UPCL....229
Table 6.16: Status of KCC Consumers....232
Table 6.17: Status of Revenue Realisation per unit sold 233
Table 6.18: Status of Bill Collection Center completed (as on 17.01.2019) 236
Table 6.19: Status of Bill Collection Center completed (as on 15.01.2020) 237

Table 6.20: Incentive for CSC VLE 238
Table 6.21: Quarterly status of CSC Transactions 239
Table 6.22: Status of AT&C Losses 241
Table 7.1: Target and Actual Losses as submitted by the Petitioner for FY 2018-19 263
Table 7.2: Details of SAIFI, SAIDI & MAIFI for April 2018 to August 2019 267
Table 7.3: Details of Year-wise power procurement projected by the Petitioner 282
Table 7.4: Age-wise Creditors as submitted by the Petitioner 284

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No.: 50 of 2019

In the Matter of:

Petition filed by Uttarakhand Power Corporation Limited for True up for FY 2018-19, Annual Performance Review for FY 2019-20 and ARR and Tariff for FY 2020-21.

AND

In the Matter of:

Uttarakhand Power Corporation Limited

Urja Bhawan, Kanwali Road, Dehradun …Petitioner

Coram

Shri D.P. Gairola	**Member (Law)**
Shri M.K. Jain	**Member (Technical)**

Date of Order: April 18, 2020

Section 64(1) read with Section 61 and 62 of the Electricity Act, 2003 (hereinafter referred to as "the Act") requires the Generating Companies and the Licensees to file an application for determination of tariff before the Appropriate Commission in such manner and along with such fee as may be specified by the Appropriate Commission through Regulations.

In accordance with the relevant provisions of the Act, the Commission had notified Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011 (hereinafter referred to as "UERC Tariff Regulations, 2011") for the first Control Period from FY 2013-14 to FY 2015-16 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC. The Commission had issued the MYT Order dated May 6, 2013 for the Control Period from FY 2013-14 to FY 2015-16. In accordance with the provisions of the UERC Tariff Regulations, 2011, the Commission had carried out the Annual Performance Review for FY 2013-14, FY 2014-15 and FY 2015-16 vide its Orders dated April 10, 2014, April 11, 2015 and April 5, 2016 respectively.

Further, in accordance with the relevant provisions of the Act, the Commission had notified the Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015 (hereinafter referred to as "UERC Tariff Regulations, 2015") for the second Control Period from FY 2016-17 to FY 2018-19 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC. The Commission had issued the Order on approval of Business Plan and Multi Year Tariff dated April 5, 2016 for the Control Period from FY 2016-17 to FY 2018-19. In accordance with the provisions of the UERC Tariff Regulations, 2015, the Commission had carried out the Annual Performance Review for FY 2016-17, FY 2017-18 and FY 2018-19 vide its Order dated March 29, 2017, March 21, 2018 and February 27, 2019 respectively.

Further, in accordance with the relevant provisions of the Act, the Commission had notified Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018 (hereinafter referred to as "UERC Tariff Regulations, 2018") for the third Control Period from FY 2019-20 to FY 2021-22 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC. The Commission had issued Order on approval of Business Plan and Multi Year Tariff dated February, 27, 2019 for the Control Period FY 2019-20 to FY 2021-22. As per the provisions of Regulation 12 and 16 of the UERC Tariff Regulations, 2018, UPCL filed a Petition (Petition No. 50 of 2019 and hereinafter referred to as the "Petition"), giving details of its revised projections of Aggregate Revenue Requirement (ARR) for FY 2020-21, based on the true up for FY 2018-19 and Annual Performance Review for FY 2019-20 on November 30, 2019.

The Business Plan Petition filed by UPCL had certain infirmities/deficiencies which were informed to UPCL vide Commission's letter no. UERC/6/TF-567/2019-20/2019/1309 dated December 9, 2019 and UPCL was directed to rectify the said infirmities in the Petition and submit certain additional information necessary for admission of the Petition. UPCL vide its letter no. 4393/UPCL/RM/B-20 dated December 17, 2019 submitted most of the information sought for admission of the Petition by the Commission. Based on the submission dated December 17, 2019 made by UPCL, the Commission vide its Order dated December 20, 2019 provisionally admitted the Petition for further processing with the condition that UPCL shall furnish any further information/ clarifications as deemed necessary by the Commission during the processing of the Petition within the time frame, as may be stipulated by the Commission, failing which the Commission may proceed to dispose of the matter as it deems fit based on the information available with it.

This Order, accordingly, relates to the APR Petition filed by UPCL for true up for FY 2018-19, APR for FY 2019-20 and ARR for FY 2020-21 and is based on the original as well as all the subsequent submissions made by UPCL during the course of the proceedings.

Tariff determination being the most vital function of the Commission, it has been the practice of the Commission to elaborate in detail the procedure and to explain the underlying principles in determination of tariffs. Accordingly, in the present Order also, in line with the past practices, the Commission has tried to elaborate the procedure and principles followed by it in determining the ARR of the licensee. For the sake of convenience and clarity, this Order has further been divided into following Chapters:

Chapter 1 - Background and Procedural History

Chapter 2 - Stakeholders' Objections/suggestions, Petitioner's Responses & Commission's Views

Chapter 3- Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2018-19

Chapter 4 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2019-20 and ARR for FY 2020-21.

Chapter 5 – Tariff Rationalisation, Tariff Design and related issues

Chapter 6 - Review of Commercial Performance of UPCL

Chapter 7 - Commission's Directives

1. Background and Procedural History

In accordance with the provisions of the Uttar Pradesh Reorganization Act 2000 (Act 29 of 2000), enacted by the Parliament of India on August 25, 2000, the State of Uttaranchal came into existence on November 9, 2000. Section 63(4) of the above Reorganization Act allowed the Government of Uttaranchal (hereinafter referred to as "GoU" or "State Government") to constitute a State Power Corporation at any time after the creation of the State. GoU, accordingly, established the Uttaranchal Power Corporation Limited (UPCL) under the Companies Act, 1956, on February 12, 2001 and entrusted it with the business of transmission and distribution in the State. Subsequently, from April 1, 2001, all works pertaining to the transmission, distribution and retail supply of electricity in the area of Uttaranchal were transferred from UPPCL to UPCL, in accordance with the Memorandum of Understanding dated March 13, 2001, signed between the Governments of Uttaranchal and Uttar Pradesh. On May 31, 2004, GoU first vested all the interests, rights and liabilities related to Power Transmission and Load Despatch of "Uttaranchal Power Corporation Limited" into itself and, thereafter, re-vested them into a new company, i.e. "Power Transmission Corporation of Uttaranchal Limited", now renamed as "Power Transmission Corporation of Uttarakhand Limited" after change of name of the State. Since then Uttarakhand Power Corporation Ltd. (UPCL) a company wholly owned by the Government of Uttarakhand became the sole distribution licensee engaged in the business of distribution and retail supply of power in the State of Uttarakhand.

The Commission vide its Order dated May 6, 2013 issued the Order on approval of Business Plan for UPCL for the first Control Period FY 2013-14 to FY 2015-16 and Tariff for FY 2013-14. Further, the Commission had issued the Tariff Orders for FY 2014-15 and FY 2015-16 vide its Orders dated April 10, 2014 and April 11, 2015 respectively.

The Commission vide its Order dated April 5, 2016 issued the Order on approval of Business Plan for UPCL for the second Control Period from FY 2016-17 to FY 2018-19 and Tariff for FY 2016-17. Further, the Commission had issued the Tariff Orders for FY 2017-18 and FY 2018-19 vide its Orders dated March 29, 2017 and March 21, 2018 respectively.

The Commission, thereafter, vide its Order dated February 27, 2019 issued the Order on approval of Business Plan for UPCL for the second Control Period from FY 2019-20 to FY 2021-22 and Tariff for FY 2019-20.

As per the provisions of Regulation 12 of the UERC Tariff Regulations, 2018, UPCL filed a Petition (Petition No. 50 of 2019 and hereinafter referred to as the "Petition"), giving details of its revised projections of Aggregate Revenue Requirement (ARR) for FY 2020-21, based on the true up for FY 2018-19 and Annual Performance Review for FY 2019-20 on November 30, 2019.

The Petition filed were provisionally admitted by the Commission vide its Orders dated December 20, 2019. The Commission, through its above Admittance Order dated December 20, 2019, to provide transparency to the process of tariff determination and give all the stakeholders an opportunity to submit their objections/suggestions /comments on the proposals of the Distribution Licensee, also directed UPCL to publish the salient points of its Petitions in the leading newspapers. The salient points of the Petitions were published by the Petitioner in the following newspapers:

Table 1.1: Publication of Notice

S.No.	Newspaper Name	Date of Publication
1.	Amar Ujala	23.12.2019
2.	Dainik Jagran	23.12.2019
3.	Hindustan (Hindi)	23.12.2019
4.	Times of India	23.12.2019

Through above notice, the stakeholders were requested to submit their objections/suggestions/comments latest by 31.01.2020 (copy of the notice is enclosed as **Annexure 3**). The Commission received in all 43 objections/suggestions/comments in writing on the Petition filed by UPCL. The list of stakeholders who have submitted their objections/suggestions/comments in writing is enclosed as **Annexure-4.**

Further, for direct interaction with all the stakeholders and public at large, the Commission also held public hearings on the proposals filed by the Petitioner at the following places in the State of Uttarakhand.

Table 1.2: Schedule of Hearings

S. No	Place	Date
1.	Champawat	February 26, 2020
2.	Rudrapur	February 28, 2020
3.	Uttarkashi	March 04 2020
4.	Dehradun	March 06, 2020

The list of participants who attended the Public Hearing is enclosed at **Annexure-5**.

The Commission also sent the copies of salient features of tariff petitions to Members of the

State Advisory Committee and the State Government. The salient features of the tariff Petitions submitted by UPCL were also made available on the website of the Commission, i.e. www.uerc.gov.in. The Commission also held a meeting with the Members of the Advisory Committee on March 16, 2020, wherein, detailed deliberations were held with the Members of the Advisory Committee on the various issues linked with the Petition filed by UPCL.

The objections/suggestions/comments, as received from the stakeholders through mail/post as well as during the course of public hearing were sent to the Petitioner for its response. All the issues raised by the stakeholders and Petitioner's response and Commission's views thereon are detailed in Chapter 2 of this Order. In this context, it is also to underline that while finalizing this Order, the Commission has, as far as possible, tried to address the issues raised by the stakeholders.

Meanwhile, based on the scrutiny of the Petition submitted by UPCL, the Commission vide its letter no. UERC/6/TF-567/2019-20/2019/1416 dated January 03, 2020, pointed out certain data gaps in the Petitions and sought following additional information/clarifications from the Petitioner:

- Resubmit all the Formats using formulae and appropriately link the same to the relevant formats for ensuring consistency and accuracy of the data submitted.
- Audited Commercial Diary for FY 2018-19.
- Category Wise sales booked on the basis of meter reading and on the basis of assessment.
- Action Plan to improve billing efficiency of the identified high loss feeders.
- Justification for source wise increase in power purchase cost in FY 2018-19 vis-a-vis FY 2017-18 including short term power purchase.
- Audited COMDATA for FY 2018-19 and for FY 2019-20 till December 2019.
- Month wise quantum and cost of power procurement and sold through IEX, Tender, other short-term power purchased/sold in FY 2018-19.
- Documentary proof of equity infusion towards funding capitalisation as claimed for FY 2018-19.
- Amount of Grant received from the Central and State Government for FY 2018-19 and for FY 2019-20 (Till Nov).

- Pending Electrical Certificates for capitalisation proposed in FY 2018-19.
- Scheme wise Justification for financial progress lagging considerably vis-a-vis physical progress.
- Computation of Earned Leave encashment booked for FY 2018-19
- Details of expesnes incurred towards bandwidth, software and Licence renewal charges for FY 2018-19.
- Monthly Power Purchase bills for April 2019 to December 2019.
- Current compliance to the Directives issued by the Commission.

So as to have better clarity on the data filed by the Petitioner and to remove inconsistency in the data, a Technical Validation Session (TVS) was also held with the Petitioner's officers on January 27, 2020, for further deliberations on certain issues related to the Petition filed by UPCL. Minutes of above Technical Validation Session were sent to the Petitioner vide Commission's letter no. UERC/6/TF-567/2019-20/2020/1521 dated January 28, 2020, for its response.

The Petitioner submitted the replies to the data gaps and clarifications sought during TVS vide its letter no. letter no. 455/UPCL/RM/B-21 dated 05.02.2020, letter no. 608/UPCL/RM/B-20 dated February 11, 2020. The submissions made by UPCL in the Petition as well as additional submissions have been discussed by the Commission at appropriate places in the Order along with the Commission's views on the same.

2. Stakeholders'Objections/Suggestions, Petitioner's Responses and Commission's Views

The Commission has received suggestions and objections on UPCL's Petition for True up for FY 2018-19, Annual Performance Review for FY 2019-20 and Determination of Aggregate Revenue Requirement for FY 2020-21. List of stakeholders who have submitted their suggestions and objections in writing is given at **Annexure-3** and the list of Respondents who have participated in the Public Hearings is enclosed at **Annexure-4**. The Commission also obtained responses from UPCL on the comments received from the stakeholders.

For the sake of clarity, the objections raised by the stakeholders and responses of the Petitioner have been consolidated and summarized issue wise. In the subsequent Chapters of this Order, the Commission has kept in view the suggestions/objections/comments of the stakeholders and replies of the Petitioner while deciding the ARR for UPCL.

2.1 General

2.1.1 *Compliance to Regulations/ Directions of Commission*

2.1.1.1 Stakeholder's Comments

Shri Sanjay Agarwal of Mussoorie Hotels Association, Shri Deepak Gupta of Hotel and Restaurant Association of Uttaranchal submitted that increase in tariff for electricity every year increases the burden on the consumers and should be revised after 3 years.

Hotel Association, Uttarkashi submitted that tariff rates should not be increased every year, instead, it should be increased by 10% once in every five years.

2.1.1.2 Petitioner's Reply

The Petitioner submitted that with a view to fix the tariff close to the actual cost of supply, it is necessary to determine the tariff every year. Further, the Commission in its Tariff Order dated 27.02.2019 at para 2.1.1.3 has also held as follows:

"As per the provisions of UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018, the tariff for the ensuing year is determined every year based on the true-up of the ARR of previous year for which latest audited accounts are available and the latest power purchase

costs. Further, the tariff is determined on the basis of normative parameters and expenses are allowed only after carrying out due prudence check.”

2.1.1.3 Commission’s Views

As per the provisions of UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018, the tariff for the ensuing year is determined every year based on the true-up of the ARR of previous year for which latest audited accounts are available. Further, the tariff is determined based on the normative parameters and past trends and expenses are allowed only after carrying out due prudence check.

2.2 Overall Tariff Increase

2.2.1.1 Stakeholder’s Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. submitted that the proposed overall tariff hike of 13.31% by all the utilities in consumer tariffs is not favorable for the industries and the State and requested for reduction in transmission and distribution losses, improving billing system, curbing AT&C losses, etc.

Shri Vikas Singh of M/s Hindusthan National Glass & Industries Ltd. submitted that tariff must decrease as solar tariff has decreased since the last 4-5 years.

Shri Ashok Shukla of M/s V.N. Plastics Pvt. Ltd. and R.T.I Club, Uttarakhand, submitted that the tariff of electricity is continuously increasing which is injustice to the hard-earned money of the common man.

Shri Sanjeev Jindal of M/s Vishwanath Papers & Boards Ltd., Shri Prem Narayan Singh of M/s Ambuja Castings (P) Ltd., Rajeev Jindal of M/s Uttranchal Ispat (P) Ltd., M/s Ambashakti Glass India Pvt. Ltd submitted that the additional energy charge should be removed.

Shri B P Maithani of RTI Club, Uttarakhand, Shri Ram Kumar Goel of Hotel Association, submitted that an Additional Energy Charge of Rs. 0.39 per unit is sanctioned for only two quarters and should be withdrawn from April 2020. He also submitted that UPCL is already levying fuel charge adjustment of Rs. 0.02 per unit separately, which was earlier of Rs. 0.01 per unit and the hike appears to be arbitrary which seems to be without any approval by the Commission.

Shri Munish Talwar of M/s Asahi India Glass Ltd., Shri Amar S Dhunta, Shri Ram Kumar Goel of Hotel Association, Mussorie, Shri Rajendra Chaudhary, Shri Ramesh Chauhan of Nagar Vyapas Mandal, Uttarkashi, Shri Katar Singh submitted that the overall tariff has been doubled within few years, hence, the tariff should not be increased this year.

Hotel Association, Uttarkashi submitted that electricity duty and energy cess should be abolished.

Shri Ram Kumar Goel of Hotel Association submitted that the average per unit charge levied by the consumer is almost Rs. 7/unit inclusive of Electricity Duty, Cess etc.

The District Advocate Association, Uttarkashi submitted that the electricity rates imposed on the consumers are on the higher side even though there are many hydro projects in the State of Uttarakhand. Therefore, the stakeholder requested the Commission to abolish the fixed charges, fuel charges and electricity duty imposed on the consumers.

Shri Naval Duseja of Flex Foods Limited submitted that the cost component of power accounts to approximately 20% of the total cost of production in food processing. Therefore, any further increase in power tariff will directly impact the feasibility of the food business by making it difficult to compete in international markets. The stakeholder further submitted that no justification has been provided for the increase in the proposed tariff.

Shri Arvind Jain submitted that free electricity should be given upto 300 units in two months.

Shri Sanjay Chaudhary of Bharatya Kisan Union, Shri Kuldeep Singh of Bharatiya Kisan Union submitted that electricity bills are being increased without considering farmers interests, hence, the tariff for private tube well should be reduced.

Shri Satish Agarwal submitted that the taxes and other charges should be removed from the bill and further requested the Commission to charge the bill on per unit basis.

2.2.1.2 Petitioner's Reply

The Petitioner submitted that being a commercial organization it is required to meet its Annual Revenue Requirement out of the revenue realized from the consumers through electricity tariffs. The revenue deficit for FY 2020-21 at existing tariff has been estimated at Rs. 543.83 Crore for which an overall tariff hike of 7.70% is required. Against the average tariff hike, a tariff hike of 11.84% for domestic, 9.87% for Non Domestic, 5.53% for PTW, 8.78% for LT Industry and 5.66 % for HT industry has been proposed. The Petitioner submitted that it has provided justification on each claim of expenditure along with the additional data as per the Commission's direction.

The Petitioner further submitted that the tariff (Rs. 4.95/unit) of Domestic Category has been proposed at only 81.68% of average cost of supply and tariff of (Rs. 2.31/unit) of BPL Category has been proposed at only 38.12% of average cost of supply.

The Petitioner submitted that at present it procures 2.6% of the power from solar energy sources and the actual average cost from these sources has increased from Rs 5.97 per unit in FY 2017-18 to Rs 6.15 per unit in FY 2018-19. The increase in power purchase cost along with other costs necessitates hike in tariff which has been sought in the Petition.

With regards to Electricity Duty and Green Energy Cess, the Petitioner submitted that, as per section 3 of Uttar Pradesh Electricity (Duty) Act (Uttarakhand adaptation and modification) Order 2001, the State Government is empowered to fix the rate of Electricity Duty to be charged from various categories of consumers. GoU vide its notification no: 79/I/2016-01(3)/01/2003, dated 25-01-2016 has fixed these rates applicable with effect from 01.01.2016. The Petitioner is charging electricity duty as per Government orders and the Electricity Duty charged from consumers is payable by UPCL to GoU. Therefore, the matter may be taken up with GoU. As per GoU notification dated 17.06.2015, the rate of Green Energy Cess has been determined at 10 paise per unit and, therefore, the matter may be taken up with GoU.

With regards to Additional Energy Charge, the Petitioner submitted that, as against the approved power purchase of Rs. 3.94 per unit, the actual power purchase cost for FY 2018-19 was Rs. 4.26 per unit resulting into additional power purchase cost of Rs. 295.95 Crore after reducing the power purchase cost on account of increase in fuel charges, the recovery of which has been allowed by UERC through Fuel Adjustment during FY 2018-19. However, due to high difference of approved and actual power purchase cost for FY 2018-19, it was difficult for the Petitioner to make the regular power purchase payments and day to day cash expenses and hence, it had filed a petition in the matter before the Commission for the recovery of the additional power purchase cost during FY 2019-20. Further, the value of Rs. 295.95 Crore will be adjusted in the ARR of FY 2020-21 while truing up the expenses and revenues for FY 2018-19.

With regard to subsidy, the Petitioner submitted that in case State Government wants to give any concession to any category, it may give direct subsidy to that category as provided under Section 65 of the Electricity Act, 2003.

2.2.1.3 Commission's Views

The Commission is of the view that the overall tariff increase is a function of projected Annual Revenue Requirement for the ensuing year (including impact of truing up of expenses and revenue for previous year) and projected revenue at existing tariffs. The Commission has carried out the detailed scrutiny of ARR for FY 2020-21 and truing up for FY 2018-19 in accordance with the provisions of the relevant Regulations as discussed in subsequent Chapters of this Order and as an outcome of scrutiny, the Commission has approved a marginal tariff increase as discussed in Chapter 5 of this Order. It is further clarified that Additional Energy Charges levied by the Commission was only applicable till March 31, 2020 and stands withdrawn thereafter.

Further, issues raised with regards to charging of Electricity Duty and Energy Cess, the Commission is of the view that the same is not under the jurisdiction of this Commission and the consumer may approach the State Government for any relief. Further, FCA is being approved in accordance with the Act and the Regulations based on the revision in actual energy charges vis-à-vis the approved charges of thermal generating stations due to change in fuel costs.

2.3 Domestic Tariff

2.3.1.1 Stakeholder's Comments

Uttarakhand District Panchayat Association submitted that electricity should be free of cost for the rural consumers and 50% reduction should be given to the urban consumers. The stakeholder further submitted that discount of 90% should be given to the consumers who have pending arrears in rural areas and thereby, disposing off their electricity bills.

Shri Ramesh Chauhan of Nagar Vyapas Mandal, Uttarkashi submitted that the various other charges increase the electricity bill by 30%. Therefore, the stakeholder requested the Commission to provide free electricity and free water of 200 units & 20,000 litres respectively.

Hotel Association Uttarkashi submitted that the tariff rates for domestic consumers should be reduced by 50%.

Shri J.P. Nautiyal, Ex-President, Bar Council and Shri Sanjay Chaudhary of Bharatiya Kisan Union submitted that the rate of electricity should be around Rs. 1/unit. The stakeholder further submitted that the residents who lost their lands due to development of hydro projects may be provided free electricity upto 500 units per month.

Shri Vijay Singh Verma submitted that minimum load should be of 2 kW to minimize transformer failure rate. He also submitted that the domestic consumers should be brought under the ambit of maximum demand.

Shri Rajendra Chaudhary submitted that the consumers should be given free electricity upto 400 units per month and flat rate tariff of Rs. 2 /unit should be charged thereafter.

Shri Jagdish Bhandari submitted that the Dairy farming consumer should be included under Domestic category and not under Commercial category as is done at present. It further submitted that the Dairy farming industry across the world is showing a slowdown and any increase in tariff shall burden the consumers. Further, in Delhi the consumption for such use upto 1000 units is billed under Domestic category and in Andhra Pradesh, the animal husbandry is charged at Rs. 3.86/ unit.

2.3.1.2 Petitioner’s Reply

The Petitioner submitted that being a commercial organization it is required to meet its Annual Revenue Requirement out of the revenue realized from the consumers through electricity tariffs. The revenue deficit for FY 2020-21 at existing tariff has been estimated at Rs. 543.83 Crore for which an overall tariff hike of 7.70% is required. Against the average tariff hike, a tariff hike of 11.84% for domestic has been proposed. It is to apprise that the tariff of Domestic Category (Rs. 4.95/unit) has been proposed at only 81.68% of average cost of supply and tariff of BPL Category (Rs. 2.31/unit) has been proposed at only 38.12% of average cost of supply.

In case State Government wants to give any concession to any category, it may give direct subsidy to that category as provided under Section 65 of the Electricity Act, 2003.

With regards to minimum load, the Petitioner submitted that the Commission may take view on the request of consumer.

With regard to Dairy farming, the Petitioner submitted that the Commission may consider the request of the consumer in view of provisions of Electricity Act, 2003 and Rules and Regulations issued thereunder.

With regards to free electricity, the Petitioner has submitted that UPCL is a commercial organization and is required to meet its Annual Revenue Requirement out of the revenue realized from the consumers through electricity tariffs. In case State Government wants to give any concession to any category, it may give direct subsidy to that category as provided under Section 65 of the Electricity Act, 2003.

2.3.1.3 Commission's Views

As discussed earlier, based on the ARR for FY 2020-21 including impact of truing up for FY 2018-19, the Commission has marginally increased the tariff with respect to tariff for FY 2019-20 approved vide Tariff Order dated 27.02.2019 to meet the projected revenue gap as discussed in detail in Chapter 5 of the Order.

With regard to the request of various stakeholders for considering small dairy farms under Domestic Category, the Commission as discussed in Chapter 5 of this Order has considered the same provided it meets the terms and conditions with regard to load and consumption as stated therein.

With regard to suggestion received on minimun load to be approved under Domestic Category, the Commission shall consider the suggestion while finalising the Supply Code.

Further, under the Act and the Regulations, the tariffs for the consumers should be fixed close to the average cost of supply, subject to the extent of cross subsidies as stipulated in the National Tariff Policy, hence, free electricity cannot be allowed to any consumer. Any demand of free or subsidized tariff can be met only if State Government decides to subsidise the tariff for any consumer category by paying subsidy under Section 65 of the Act.

2.4 Non-Domestic Tariff

2.4.1.1 Stakeholder's Comments

Shri Sanjay Agarwal of Mussoorie Hotels Association, Shri Deepak Gupta of Hotel and Restaurant Association of Uttaranchal submitted that the proposed increase in tariff by 7.70% is exorbitant. The stakeholders also submitted that the consumers are also being levied a fixed charge of Rs. 75 per kVA apart from the charges like electricity tariff, electricity duty, green cess, FCA charges and Energy charges. The stakeholders further requested the Commission to withdraw the additional energy charge which is being levied on the consumers.

Hotel Association Uttarkashi submitted that demand charges for commercial category be abolished.

2.4.1.2 Petitioner's Reply

The Petitioner submitted that being a commercial organization it is required to meet its Annual Revenue Requirement out of the revenue realized from the consumers through electricity tariffs. The revenue deficit for FY 2020-21 at existing tariff has been estimated at Rs. 543.83 Crore for which an overall tariff hike of 7.70% is required. Against the average tariff hike, a tariff hike of 9.87% for Non Domestic has been proposed.

With regard to additional energy charge, the Petitioner submitted that, there was substantial difference between the approved and actual power purchase cost for FY 2018-19, and hence, it was difficult for the Petitioner to make the regular power purchase payments and meet its day to day cash expenses and hence, it filed a petition in the matter before the Commission for the recovery of this additional power purchase cost during FY 2019-20. Further, the revenue of Rs. 295.95 Crore collected through extra charge will be adjusted in the ARR of FY 2020-21 while truing up the expenses and revenue for FY 2018-19.

With regard to demand charges, the Petitioner submitted that Section 45 (3) of the Electricity Act, 2003 mandates for imposition of Fixed Charge in addition to the energy charge for electricity supplied. Irrespective of the actual consumption of energy, UPCL is required to be ready to supply energy according to the contracted load of the consumer. For this purpose, a certain amount of expenditure is being incurred by UPCL which is not related to energy consumed but related to the contracted load of the consumer. The Petitioner submitted that the recovery of this amount should be done through demand/fixed charges whether the consumer consumes electricity or not. The total cost of UPCL may be segregated into power purchase cost and other costs. The other cost is about 10% to 15% of the total cost and is fixed in nature. This cost should be recovered through fixed/demand charges. In the absence of Fixed Charges, the cost of creation of infrastructure pertaining to the consumers not consuming electricity shall be shifted to the consumers who are consuming electricity. Therefore, the Petitioner submitted that the Fixed / Demand Charges are required to be part of Tariff.

2.4.1.3 Commission's Views

With regards to removal of additional energy charges, the Commission would like to clarify that the additional energy charges were approved for an interim period and were applicable till March 31, 2020 and has been withdrawn thereafter.

With regard to suggestion of withdrawal of Demand Charges, the Commission would like to clarify that the component of fixed charges in the ARR for FY 2020-21 is around 41% which the Petitioner has to incur irrespective of consumption and, therefore, the same cannot be completely withdrawn. The Commission in Chapter 5 of this Order has discussed the same in detail while approving the Demand Charges for each Consumer Category.

2.5 Agriculture Allied Activities

2.5.1.1 Stakeholder's Comments

Shri Umesh Chandra Nautiyal of Uttarakhand Pragatishil requested the Commission to include dairy farming under RTS-4A Agriculture Allied Activity. He also submitted that Reserve Bank of India has categorized dairy farming under Agriculture activity as per Circular dated 01.07.2014. The stakeholder further submitted that no processing of milk is done at dairy farm and in many States, dairy farming is being charged at lesser rates than the Industrial rate.

Shri Jagdish Bhandari, Shri Lalit Badakoti submitted that the Dairy farming consumer should be included in the RTS-4A category and not under Commercial category as is at present. The Dairy farming industry across the world is showing a slowdown and any increase in tariff shall burden the consumer.

Shri Tika Singh Saini of Bharatiya Kisan Union submitted that fuel charges and additional energy charges should be removed from the electricity bill of the private tube well consumers. The stakeholder further submitted that it has been observed that for PTW consumers meter reading is being done on assessment basis even though the meters are functional.

Shri Rajendra Chaudhary submitted that the farmers should be given free electricity.

Shri Vijay Singh Verma has submitted that the RTS-4A connection should be monitored on regular basis to avoid unauthorized usage of electricity.

Shri Katar Singh submitted that the tariff for the dairy farming and agricultural products and private tube wells should be reduced.

Shri Manish Nawani, representative of Dairy farmers, Shri Rajesh Madhukant has submitted that the Dairy farming consumer should be included in the Agriculture category and not under Commercial category as is at present.

2.5.1.2 Petitioner's Reply

The Petitioner submitted that the category RTS-4A pertains to "Agriculture Allied Activities" and was created by the Commission vide Tariff Order on Retail Supply Tariff of UPCL for 2015-16 dated 11th April, 2015. As per the Tariff Order, this schedule currently applies to supply of power for use in nurseries growing plants/ saplings, polyhouses growing flowers/vegetables and fruits including Mushroom cultivation which doesn't involve any kind of processing of product except for storing and preservation.

As per Section 61(g) of the Electricity Act, 2003, the Tariff should progressively reflect the Cost of Supply of Electricity and also reduce Cross Subsidies. As per the existing tariff order the fishery activity is covered under Rate Schedule RTS – 7 which is subsidizing category whereas the Rate Schedule RTS – 4A is subsidized category. In case, Dairy activity is covered under Rate Schedule RTS – 4A it will be transferred from subsidizing category to subsidized category which is against the provisions of Electricity Act, 2003.

The Petitioner submitted that being a commercial organization it is required to meet its Annual Revenue Requirement out of the revenue realized from the consumers through electricity tariffs. The revenue deficit for FY 2020-21 at existing tariff has been estimated at Rs. 543.83 Crore for which an overall tariff hike of 7.70% is required. Against the average tariff hike, a tariff hike of 5.53% for PTW has been proposed.

The Commission in its Tariff Order dated 27-02-2019 has also held in the matter as follows:

"*The Commission with regard to inclusion of fishery and dairy farming in RTS-4A category is of the view that these activities cannot be included in RTS-4A as Rts-4A is a subsidized category applicable for supply of power for use in nurseries growing plants/saplings, polyhouses growing* *flowers/vegetables and fruits including Mushroom cultivation which does not involve any kind of processing of product except for storing and preservation."*

Further, the Petitioner requested the Commission to consider the request of the consumer in view of the provisions of the Electricity Act, 2003 and Rules and Regulations issued thereunder.

With regards to PTW connections, there are instructions to all the field officers that the bills of the consumers should be generated on actual meter reading basis. However, some times in the absence of actual meter reading bills are generated provisionally based on normative consumption as approved by UERC. On the actual reading of such cases, the provisional consumption is withdrawn and the bills are issued only on actual meter reading basis.

With regard to monitoring of RTS-4, the Petitioner submitted that metering has been done for all the consumers under this category and monitoring of the consumption of all the categories is being done by the officers of UPCL.

2.5.1.3 Commission's Views

The Commission with regards to small dairies, as per the terms and conditions stipulated in Chapter 5 of this Order has included the same under Domestic Category. RTS-4A is applicable only to supply of power for use in nurseries growing plants/ saplings, polyhouses growing flowers/vegetables and fruits including Mushroom cultivation and dairies or fisheries cannot be included in the agricultural activity and hence, the Commission has included the small dairies in Domestic category.

With regard to billing on assessment basis done by the Petitioner, the Commission is closely monitoring the same and have been issuing directions from time to time to reduce the same.

2.6 Industrial Tariff

2.6.1 *Tariff Hike*

2.6.1.1 Stakeholder's Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. submitted that UPCL has proposed an increase of Rs. 85 in fixed charges, i.e. from Rs. 360/kVA to Rs. 445/kVA.

He further submitted that the fixed charge has been increased by more than 129% since the issuance of first tariff order in the State and hence, the Fixed Charges should not be increased.

Shri Vikas Singh of M/s Hindusthan National Glass & Industries Ltd. submitted that fixed charges should not be increased as it is on the higher side when compared with the neighboring states. Further, the stakeholder submitted that high electricity duty along with Green Energy Cess is burdening the consumers, hence, either of the one should be discontinued.

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited, M/s Khatema Fibres Limited have submitted that hike in the demand charges by 23.6% from Rs. 360 per kVA to Rs. 445 per kVA for HT industries above 1000 kVA is against the principle of equitable justice.

Shri Man Singh of M/s ALPS Industries Ltd. submitted that the tax benefit period is over for most of the industries and the proposed hike should be restricted. Further, he requested the Commission to extend the Textile Policy provisions for them, according to which there will be no power cut for next 7 years and a rebate of Rs. 1/unit and 100% exemption from electricity duty for next 7 years. He also submitted to extend some concession for smooth working of Spinning Units.

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. submitted that the three charges, namely, green cess, electricity duty and royalty on water, which are levied on electricity, directly and indirectly affects the tariff and makes electricity costlier by Rs. 1/ unit. Therefore, the stakeholder suggested that the State Government decrease its charges.

M/s Ambashakti Glass India Pvt. Ltd submitted that the average per unit charge levied on the consumer is almost Rs. 7/unit inclusive of Electricity Duty, Cess etc.

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that the revenue shortfall of UPCL is due to the load shedding on industrial consumers and in other states the rostering of industrial consumers is done as a last resort to maintain grid balance.

Shri A. Jaiswal of M/s Ambuja Cement Limited submitted that there is an increase of 23.61% in demand charges and 9% in Energy Charges during normal hours, peak hours and off-peak hours and this will heavily impact the consumers by making it difficult to do the business in a competitive environment. The stakeholder further requested the Commission to consider minimum increase in energy charges.

2.6.1.2 Petitioner's Reply

The Petitioner submitted that for the recovery of the fixed charge, which costs around 10% to 15% of the total cost, the billable demand has been approved by the Commission as 80% of the Contracted Load or actual recorded demand during the month, whichever is higher. Reduction in billable demand from 80% would reduce the recovery of the fixed charges which should be avoided in a mandate of two-part tariff. Further, the Petitioner submitted that, if demand charges are reduced, then the energy charges will have to be increased in order to have composite tariff equivalent to the cost of supply plus required level of cross subsidy.

The Petitioner submitted that UPCL is a Commercial Organisation and is required to meet its Annual Revenue Requirement out of the revenue realized from the consumers through electricity tariffs. The revenue deficit for FY 2020-21 at existing tariff has been estimated at Rs. 543.83 Crore for which an overall tariff hike of 7.70% is required. Against the average tariff hike, a tariff hike of 5.66 % for HT industry has been proposed. The Petitioner has provided justification on each claim of expenditure along with additional data as per the Commission's direction.

With regards to Electricity Duty and Green Energy Cess, the Petitioner submitted that as per Section 3 of Uttar Pradesh Electricity (Duty) Act (Uttarakhand adaptation and modification) Order 2001, the State Government is empowered to fix the rate of Electricity Duty to be charged from various categories of consumers. GoU vide its notification no: 79/I/2016-01(3)/01/2003 dated 25.01.2016 has fixed these rates applicable with effect from 01.01.2016. The Petitioner is charging electricity duty as per Government orders and the Electricity Duty charged from consumers is payable by UPCL to GoU. Therefore, the matter may be taken up with GoU. As per GoU notification dated 17.06.2015, the rate of Green Energy Cess has been determined at 10 paise per unit and therefore, the matter may be taken up with GoU.

2.6.1.3 Commission's Views

With regard to suggestion on determination of fixed charges, the Commission would like to clarify that the fixed charges component in the ARR for FY 2020-21 is around 41% which the Petitioner has to incur irrespective of consumption. The Commission in Chapter 5 of this Order has discussed the same in details while approving the Demand Charges for each Consumer Category.

Further, issues raised with regards to charging of Electricity Duty, Energy Cess and Royalty on Water, the Commission is of the view that the same is not under the jurisdiction of this Commission and the consumer may approach the State Government for any relief.

2.7 Load Factor based Tariff

2.7.1.1 Stakeholder's Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. submitted that the Commission may determine less rates for high load factor and high rates for low load factor to promote energy consumption by HT industries who are the maximum contributor of revenue to UPCL. He further suggested that the relaxation to progressing industries may be taken on the principle of Himachal Pradesh.

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited, M/s Khatema Fibres Limited have submitted that the load factor-based tariff has increased the cross subsidy burden on HT industries and the Commission should provide telescopic tariff for charging incremental consumption beyond specified load factor on higher rates instead of charging the whole consumption at higher rate of energy charge for the particular load factor slab.The stakeholder also submitted that procuring marginal power at a costlier rate due to increased consumption by the industrial consumers defies logic and further, the Petitioner did not provide any data to prove that such marginal power is procured exclusively for HT industries.

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited have submitted that the formula considered by the Commission for Load Factor calculation results in paying of higher energy charges while using 80% of the contracted demand and needs to be rectified as below:

$$Load\ factor = \frac{Consumption\ during\ billing\ period\ \times 100}{\begin{array}{c}Billable\ demand\ or\ Contracted\ demand\ if\ the\ billable\ demand\ is\ higher\\ than\ the\ contracted\ demand\ \ \times No.\ of\ hours\ in\ the\ billing\ period\end{array}}$$

2.7.1.2 Petitioner's Reply

The Petitioner submitted that Load Factor formula is based on the actual requirement of load of the consumer. In case maximum demand is lower than the contracted load, maximum demand (actual requirement) is considered. In case maximum demand is higher than the contracted load, contracted load is considered because the consumer has contracted this capacity.

The Petitioner submitted that tariff may be differentiated based on the consumer load factor as per Section 62(3) of the Electricity Act, 2003. Hence, higher energy charges are levied for higher consumption as procurement of additional power has higher cost. Further, the Petitioner submitted that any kind of relaxation in tariff shall lead to lower revenue and, therefore, increased gap. Therefore, the only way to recover the cost from the consumers is through tariff hike.

2.7.1.3 Commission's Views

This issue had been dealt in detail by the Commission in the in-house paper issued during the MYT Order for the second Control Period. Since the marginal cost of power is higher than the average cost of power, therefore, to have cost reflective tariffs, the energy charges should increase with load factor. Further, the Commission has deliberated on this issue in detail in Chapter 5 of the Order.

2.8 Frequent Amendment in Tariff

2.8.1.1 Stakeholder's Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd, Shri Naval Duseja of Flex Foods Limited submitted that UPCL has tried to find ways to increase tariff in the past few years. The Commission in the Tariff Order for FY 2019-20 increased the tariff by around 2.27%. Further, tariff was increased by Rs. 0.50/kVAh for industries retrospectively from October 2019 onwards up to March 2020 in the form of additional energy charge. Further, FCA was imposed in every quarter during FY 2019-20. He suggested that frequent amendment in the tariff should be avoided as neither of it is supported by the Electricity Act, 2003 nor applicable regulations. He also submitted that any tariff revision needs to be applied from the current date and not from retrospective date as done in case of additional energy charge.

Shri Man Singh of M/s ALPS Industries Ltd., Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. submitted that the tariffs have already been increased twice in a year and hence, further tariff revision should be avoided.

2.8.1.2 Petitioner's Reply

The Petitioner submitted that, as against the approved power purchase of Rs. 3.94 per unit, the actual power purchase cost for FY 2018-19 was Rs. 4.26 per unit resulting into additional power purchase cost of Rs. 295.95 Crore after reducing the increased power purchase cost by way of change in variable charges, the recovery of which has been allowed through Fuel Charge Adjustment during FY 2018-19. However, due to high difference of approved and actual power purchase cost for FY 2018-19, it was difficult for the Petitioner to make the regular power purchase payments and meet the day to day cash expenses and hence, it filed a petition in the matter before the Commission for the recovery of this additional power purchase cost during FY 2019-20. Further, the value of Rs. 295.95 Crore will be adjusted in the ARR of FY 2020-21 while truing up the expenses and revenue for FY 2018-19.

Further, the Petitioner submitted that recovery of the power purchase cost is also permitted under Section 62(4) of Electricity Act, 2003.

2.8.1.3 Commission's Views

With regard to additional energy charge levied, the Commission would like to clarify that the Order was issued in the month of October 2019 and the charges were levied from October 2019 to March 2020 and, therefore, the contention of some of the stakeholders that the AEC was levied retrospectively do not hold good as the AEC was charged starting October 2019.

With regard to FCA recovery allowed by the Commission, it is clarified that the FCA adjustment ot tariffs is allowed under Section 62(4) of the Electricity Act, 2003.

2.9 Fuel Charge Adjustment

2.9.1.1 Stakeholder's Comments

Shri Man Singh of M/s ALPS Industries Ltd. submitted that UPCL brings memo of fuel charge adjustment in between the months instead of beginning of the quarter, impacting the power purchase planning and due to this consumers have to pay FCA charges to UPCL that are not planned at the beginning of the month and the consumer will not get power through Open Access due to wrong estimation of bidding rate. The stakeholder also suggested that if required these should be planned and incorporated in the overall bills.

2.9.1.2 Petitioner's Reply

The Petitioner submitted that FCA is being charged by the Petitioner only when the actual power purchase cost in any quarter is more than the approved power purchase cost for the quarter in the Tariff Order and imposition of FCA for recovery of additional power purchase cost is mandated as per Section 62(4) of the Electricity Act.

2.9.1.3 Commission's Views

The Commission during the tariff proceedings projects the cost of power purchase on the basis of past year variable charges which in turn depends upon the fuel cost. The Commission carries out due diligence while approving the rate of power purchase, however, due to several unforeseen reasons like fuel price increase, change in royalty and tax structure governing fuel prices the variable charges of fuel increases which needs to be passed on to the Petitioner as per the mechanism specified under UERC Tariff Regulations, 2018 in accordance with the provisions of the Act and numerous Judgments of Hon'ble ATE in the matter. The Commission in this Order has taken due care that the impact of such increase is mitigated to a large extent by taking suitable rate of increase in variable (fuel) cost.

2.10 Voltage wise Cost of supply

2.10.1.1Stakeholder's Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. submitted that the tariff is not aligned with the cost of supply of electricity to its consumers and the industrial consumers are cross subsidizing other consumers, which is against the spirit of Electricity Act and Tariff regulations. He requested the Commission to determine the category-wise distribution losses and, accordingly, determine the category-wise tariff.

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. submitted that the Petitioner needs to evaluate voltage wise and category wise cost of service to different consumers.

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited, M/s Khatema Fibres Limited have submitted that the Petitioner ignores the direction of the Commission to work out the voltage wise/category wise losses and cost of supply for fixation of category wise tariffs and, hence, requested the Commission to take appropriate actions to protect the interests of the consumers in the State for compliance of provision of Section 61(g) of the Act, 2003.

2.10.1.2Petitioner's Reply

The Petitioner submitted that voltage wise/ category wise losses are not available presently and is calculated on the basis of average cost of supply and permissible level of cross subsidy, as per Regulation 91 of the UERC Tariff Regulations, 2018. In the absence of availability of voltage wise losses, the distribution losses are required to be charged on an average basis from all category of consumers as well as from Open Access consumers.

The Petitioner also submitted that consumers are being allowed high voltage rebate which has been revised by the Commission in its Tariff Order dated 10th April 2014 from 1.5% to 2.5% and 5% to 7.5% for taking supply at 33 kV and 132 kV and above respectively.

2.10.1.3Commission's Views

The Commission has taken note of the concerns raised by the stakeholders and further directs UPCL to compute Voltage wise losses for each category of consumers and submit the data on voltage wise losses and cost of supply alongwith next Tariff Petition.

2.11 Billable Demand

2.11.1.1Stakeholder's Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. submitted that calculation of the billable demand for fixed charge should be on an average basis of whole month instead of peak load of a particular slot of a month.

Shri Man Singh of M/s ALPS Industries Ltd. submitted that the billable demand must be changed from 80% of contracted load to 75% of contracted load and the demand charges should be same as in FY 2019-20.

Hotel Association Uttarkashi submitted that fixed charge on contracted load at the rate of Rs. 75/ kW should be abolished and the same should be taken one time during the release of electricity connection.

2.11.1.2Petitioner's Reply

The Petitioner submitted that since the distribution network has to be laid down to meet the peak demand of the consumer, the demand charges are recovered to cover the system cost to meet the peak demand.

The Petitioner submitted that for the recovery of the fixed charges, which costs around 10% to 15% of the total cost, the billable demand has been decided by the Commission as 80% of the Contracted Load or actual recorded demand during the month, whichever is higher. Reduction in billable demand from 80% would reduce the recovery of the fixed charges which should be avoided in a mandate of two-part tariff. Further, the Petitioner submitted that, if demand charges are reduced, then the energy charges will have to be increased in order to have composite tariff equivalent to the cost of supply plus required level of cross subsidy.

2.11.1.3Commission's Views

The Commission would like to clarify that the fixed charges component in the ARR for FY 2020-21 is around 41% which the Petitioner has to incur irrespective of consumption. The Commission in Chapter 5 of this Order has discussed the same in details while approving the Demand Charges for each Consumer Category.

2.12 Distribution Losses

2.12.1.1Stakeholder's Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. requested the Commission to assess the distribution losses according to the study conducted by the Petitioner. He also requested that the Commission may determine distribution losses as approved by various States where they are applicable and, accordingly, apply the same for different category of consumers separately and decide the tariff.

Shri Munish Talwar of M/s Asahi India Glass Ltd., Shri Pankaj Gupta of Industries Association of Uttarakhand requested the Commission to direct UPCL to conduct energy audit at Sub stations level and at various voltage levels to determine the actual reasons for the losses and audit findings should be shared in the Petition.

Shri Munish Talwar of M/s Asahi India Glass Ltd. submitted that Distribution loss Trajectory of 14.5% are not viable and its computations are not mentioned in detail. He suggested that the Petitioner should provide the details of steps taken to reduce the distribution losses. He also submitted that the loss figures for urban and rural locations should be provided separately.

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited submitted that the Petitioner's submission regarding reducing loss levels beyond 15% is difficult is unjustified.

Shri Ashok Shukla of M/s V.N. Plastic submitted that distribution losses are increasing on the account of pilferage and UPCL has failed to achieve the targets set by Commission. He further requested the Commission to direct UPCL to improve performance with stringent targets.

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that the percentage of sale of power to industrial consumers is increasing year after year and, therefore, loss levels should be controlled. He also submitted that the overall losses that have been set by the Commission may have been much lesser.

Shri A. Jaiswal of M/s Ambuja Cement Limited submitted that distribution loss for open access consumers should be less than 5% in place of 14%.

Shri Jagdish Bhandari submitted that the Petitioner has not met the loss level target which resulted in the decrease in revenue realization.

Shri Vijay Singh Verma submitted that the losses submitted by UPCL are on the lower side in comparison to actual conditions and the same must be analyzed. He further submitted that UPCL should focus on reduction of commercial losses as it affects the viability of the distribution business.

Shri Sanjay Agarwal of Mussoorie Hotels Association, Shri Deepak Gupta of Hotel and Restaurant Association of Uttaranchal submitted that department's inability to curb electricity theft and misuse has resulted in the distribution loss of 14%.

Shri Kuldeep Singh submitted that UPCL should take measures to reduce distribution losses to a bare minimum and losses should not be burdened on consumers.

2.12.1.2Petitioner's Reply

The Petitioner submitted that as against the approved distribution loss level of 14.50% for FY 2018-19, UPCL has over-achieved the level of these losses at 14.32% and has claimed the same in the true-up for FY 2018-19, accordingly.

Since, the reduction in distribution losses below 15% is very difficult, UPCL on the basis of actual distribution losses of 14.32% for FY 2018-19 has proposed the reduction in these losses in line with the trajectory approved by the Commission. The distribution loss target for FY 2019-20 is 14.25% and FY 2020-21 is 14.00%.

The Petitioner submitted that the following actions were taken for the reduction of distribution losses by the Petitioner:

a) Vigilance raids had been conducted and cases registered under Sections 126 and 135 of the Electricity Act, 2003. Legal proceedings are being initiated against the person(s) who is found indulging in theft of electricity.

b) Mechanical meters are being replaced by electronic meters

c) Defective meters are being replaced

d) LT ABC is being laid in theft prone areas

e) Android based billing has been introduced for improvement in Billing Efficiency.

With Regards to Energy Audit, the Petitioner submitted that metering has been completed at all 33 kV substations up to 11 kV and are being maintained. Further, 11,602 DTs have been metered under IPDS/R-APDRP scheme and are being maintained. Further, UPCL vide letter no. 1712/UPCL/ CE/CCP-II/23/2018-19 (Feedback) dated 08-03-2019 appointed M/s Feedback Infra Pvt. Ltd. for concurrent energy audit for billing parameters for two financial years (2019-2020 & 2020-2021).

2.12.1.3Commission's Views

The Commission has taken note of the concerns raised by the stakeholders and the initiatives taken by UPCL for reducing the losses. The Commission would like to clarify that though the actual distribution losses are higher, the Commission has considered the distribution loss target as approved by it and the same has been discussed in Chapter 3 & 4 of the Order.

2.13 Delayed Payment Surcharge

2.13.1.1Stakeholder's Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. has submitted that the Petitioner charges Delayed Payment Surcharge for the period where no amount is due. The stakeholder submitted that for their industry, the bill was reflected online on 10th of January whereas the bill date and the due date mentioned on the bill was 05.01.2020 and 08.01.2020 respectively and under such circumstances only 15 days grace period saves them. Therefore, the stakeholder requested that Delayed Payment Surcharge needs to be charged only till the date payment is made in full and grace period needs to continue.

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited, M/s Khatema Fibres Limited has submitted that once a consumer becomes a defaulter, Delayed Payment Surcharge is charged on both principal amount and previous Delayed Payment Surcharge in arrears. Therefore, this anomaly needs to be corrected and the billing software needs to be modified.

2.13.1.2Petitioner's Reply

The Petitioner submitted that as per the direction of the Commission, the Petitioner is regularly allowing 15 days grace period beyond due date to the consumers. Improvement in billing system like in-house billing, Spot Billing Machine for almost all domestic consumers having load up to 25 kW, software for generating bills, instant SMS, downloadable bills, bill delivery through emails and hardcopy, led to the proposal for abolishing the grace period as the consumer is notified about the bill well in advance through various channel.

The Petitioner submitted that Delayed Payment Surcharge is not being levied on the arrear amount of delayed payment surcharge. This is being levied only on the principal amount of electricity arrears.

2.13.1.3Commission's Views

The Commission has gone throught the comments of stakeholders and submissions of the Petitioner, DPS is leviable only in case the consumer is unable to pay, in full, the amount by due date and the Petitioner is bound to allow 15 days time for payment of bills. With regard to Grace Period, the Commission has dealt with the issue in detail in Chapter 5 of this Order.

2.14 Continuous Supply Surcharge

2.14.1.1Stakeholder's Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd., Shri A. Jaiswal of Ambuja Cement Limited submitted that it is the responsibility of UPCL to supply power to the Industries, hence, no charges should be levied for providing continuous supply. The stakeholders further submitted that the proposed 10% continuous charge should be reduced to 5%.

Shri Munish Talwar of M/s Asahi India Glass Ltd., Shri Vikas Singh of M/s Hindusthan National Glass & Industries Ltd. suggested waiving off the continuous supply surcharge.

Shri Man Singh of M/s ALPS Industries Ltd. submitted that UERC should reduce the continuous power supply surcharge from 10% to 5 %, as adequate power is now available in the State. Further, the stakeholder submitted that UPCL should be penalized in case of non-supply of power to its continuous supply consumers.

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited, M/s Khatema Fibres Limited has submitted that as per the provisions of National Tariff Policy the Commission may determine the ARR of the UPCL so as to ensure the availability of power for 24 hours. He also submitted that the Commission may compute power purchase cost for 24 hours supply across all categories. The stakeholder further submitted that the Commission may not differentiate between consumers subjected to load shedding and consumers exempted from load shedding and thereby charge differential tariff. Further, he added that 10% additional charge for continuous supply needs to be reconsidered as per the provisions of the National Tariff Policy and also, if additional charge is to be levied for the whole year, it should not be more than 5% on the energy charges of the consumers opting continuous supply.

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited, M/s Khatema Fibres Limited, submitted that the continuous supply industries and general industries have been provided the same quality/ duration of supply in the past as there was no load shedding or power cuts in the State. Further, the stakeholders submitted that many of the industries have withdrawn their option of continuous supply due to breakdowns and shutdowns that take place in continuous supply feeder and in general industrial feeder and, therefore, the stakeholders requested the Commission to define continuous supply & fixation of performance standards with provision of compensation from UPCL for interruptions & breakdowns.

2.14.1.2Petitioner's Reply

The Petitioner submitted that Continuous Supply Charge is an additional charge (premium) payable by the consumers to have facility of getting continuous supply of power and are exempted from load shedding during scheduled/unscheduled power cuts and during restricted hours of the period of restriction of usage approved by the Commission from time to time. However, load shedding required due to emergency break down/shutdown is imposed on these consumers as and when the situation arises. For the purpose of ensuring continuous supply, a rate below 10% of energy changes will not be adequate as UPCL is required to incur extra infrastructure cost as well as arrangement for additional energy which is at a higher cost, and these are required to be recovered from the consumers having this facility.

Further, the Commission in its Tariff Order dated 27.02.2019 has also held in the matter as follows:

"*The Commission has already reduced the Continuous Supply Surcharge from 15% to 10% vide its Tariff Order dated 21.03.2018. As discussed in subsequent Chapters, UPCL is still having shortages in winter months which is primarily met through short term power purchases and, hence, the Commission has decided to continue with the Continuous Supply Surcharge. The Commission will review the same once the aforesaid deficit in UPCL's requirement is completely wiped off.*"

With regards to availability of quality power, UPCL has been making consistent efforts to provide uninterrupted power supply to its consumers. The load shedding during FY 2018-19 of 92.18 MU is only 0.67% of the overall energy demand. As per the provisions of the Tariff Order, if the minimum average supply to any HT Industry Consumer is less than 18 hours per day during the month, the Demand Charges applicable for such HT Industry Consumer shall be reduced by 20%.

2.14.1.3Commission's Views

The Commission has already reduced the Continuous Supply Surcharge from 15% to 10% vide its Tariff Order dated 21.03.2018. As discussed in subsequent Chapters, UPCL is still having shortages in winter months which is primarily met through short term power purchase and, hence, the Commission has decided to continue with the Continuous Supply surcharge, however, the same has been reduced to 7.5% from existing 10%. The Commission will review the same once the aforesaid deficit in UPCL's requirement is completely wiped off.

2.15 Rebate and Incentives

2.15.1.1Stakeholder's Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. proposed the rebate of 7.5% and 12% for 33 kV and 132 kV respectively.

Shri Munish Talwar of M/s Asahi India Glass Ltd. suggested that High Voltage Rebate for the consumers connected with 132 kV or above voltage level should be increased as there are negligible T&D losses at higher voltage.

Shri Man Singh of M/s ALPS Industries Ltd. & Shri Vikas Singh of M/s Hindusthan National Glass & Industries Ltd. submitted that voltage rebate on 132 kV & above should be increased from 7.5% to 10 % and that on 33 kV from 2.5% to 5 %.

Shri Man Singh of M/s ALPS Industries Ltd. and Shri Vikas Singh of M/s Hindusthan National Glass & Industries Ltd. suggested that voltage rebate should be given on Open Access units also.

2.15.1.2Petitioner's Reply

The Petitioner submitted that, presently there is no justification for increasing the existing level of High Voltage Rebates as it was revised by the Commission in its Tariff Order dated 10th April 2014 from 1.5% to 2.5% and 5% to 7.5% for taking supply at 33 kV and 132 kV and above respectively. Further, the Petitioner submitted that voltage wise/ category wise losses are not available presently and is calculated on the basis of average cost of supply and permissible level of cross subsidy, as per Regulation 91 of the UERC Tariff Regulations, 2018. In the absence of availability of voltage wise losses, the distribution losses are required to be charged on average basis from all category of consumers as well as from Open Access consumers.

The Petitioner submitted that High Voltage Rebate is admissible on the Energy Charges and as no energy charges is payable on the Open Access Energy, no question arises for allowing rebate on Open Access Energy.

2.15.1.3Commission's Views

The Commission in its Order dated April 10, 2014 considering the requests made by various stakeholders and UPCL's response on the same had modified the provisions of voltage rebate and the Commission feels that the provisions of the prevalent voltage rebate are appropriate.

2.16 Open Access

2.16.1.1Stakeholder's Comments

Shri Man Singh of M/s ALPS Industries Ltd. submitted that losses calculation on Open Access power is given with wrong formula and it should be worked out as per SLDC formula for calculation of losses. Further, the stakeholder submitted that the hike in cross subsidy surcharge from Rs. 0.51 per unit to Rs 1.17 per unit on Open Access electricity puts burden on Open Access consumers, thus making Open Access non-viable in the State of Uttarakhand.

Shri A. Jaiswal of M/s Ambuja Cement Limited submitted that NOC for short-term open access should be for a minimum period of one year/ quarter.

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. submitted regarding the detrimental impact of high cross-subsidies in waste of economic resources and revenue loss for the State utilities and has requested that Open Access needs to be made competitive in the State. The additional surcharge of Rs. 1.13 kVAh needs to be abolished since it became applicable from October 2019. He also requested that the distribution losses need to be removed or restricted to 5% in case of open access power being purchased. Further, he submitted that the cross-subsidy surcharge has to be reduced to Rs. 0.40 per kVAh.

Shri A. Jaiswal of M/s Ambuja Cement Limited submitted that UPCL has proposed an increase of 130% in cross-subsidy surcharge which is against the purpose of Open Access. Therefore, he requested the Commission not to consider any increase in cross-subsidy surcharge.

2.16.1.2Petitioner's Reply

The Petitioner submitted the methodology for the computation of Open Access energy as recorded at consumer meter and is as follows:

a) Energy purchased by the Consumer - A

b) Energy at state periphery (Ax (1-NR Losses)) - B

c) Energy at distribution periphery (Bx (1- PTCUL Losses approved by UERC) - C

d) Energy at consumer meter (C x (1- distribution losses approved by UERC)) - D

Further, the Petitioner submitted that the consumer can approach the concerned Executive Engineer or represent his case before the CGRF, in case the consumer has any grievance in the matter.

With regard to Cross subsidy surcharge, the Petitioner submitted that the methodology for cross subsidy surcharge computation is in accordance with the methodology followed by the Commission. The Petitioner mentioned that due to typo error, the cross-subsidy surcharge has been mentioned as Rs. 1.17 per unit in place of Rs. 0.34 per unit in the Petition and the Commission may consider the proposed cross subsidy surcharge for industrial consumers as Rs. 0.34 per unit.

The Petitioner mentioned that the Open Access charges have been proposed as per the provisions of UERC Regulations, 2015 and a separate proposal shall be filed before the Commission for levy of additional surcharge for the period from 01.04.2020 to 30.09.2020 as per the provisions of UERC Regulations, 2015. Further, the Petitioner submitted that they are required to be power sufficient in order to meet the requirement of these Open Access consumers including the quantum which they are buying through Open Access. Due to this obligation in case any consumer goes for Open Access, the power purchase commitments of the Petitioner become stranded and, therefore, the Open Access consumers are required to bear fixed component of power purchase cost of the Petitioner. Therefore, the absence of suitable additional surcharge levied to the Open Access consumers would result in undue burdening of the other consumers.

The Petitioner submitted that voltage wise/ category wise losses are not available presently and is calculated on the basis of average cost of supply and permissible level of cross subsidy, as per Regulation 91 of the UERC Tariff Regulations, 2018. In absence of availability of voltage wise losses, the distribution losses are required to be charged on an average basis from all category of consumers as well as Open Access consumers.

2.16.1.3Commission's Views

Some of the stakeholders have raised the issues related to Open Access such as renewal of open access applications etc., which are governed by Uttarakhand Electricity Regulatory Commission (Terms and Conditions of Intra State Open Access) Regulations, 2015. The principles for calculating Transmission/Wheeling charges, cross-subsidy surcharges & losses have already been specified in the Regulations and are, therefore, worked out on such specified principle.

2.17 Promotion of Renewable Energy

2.17.1.1Stakeholder's Comments

Shri Shakeel A. Siddiqui of M/s Kashi Vishwanath Textile Mill (P) Ltd. submitted that if any manufacturing unit wishes to commission its solar power unit, relaxation in applicable charges, i.e. the wheeling charges and distribution losses should be provided so that more industry come forward as renewable energy generator. The stakeholder further submitted that attempts need to be made to promote solar energy to farmers and domestic consumers that will not only reduce cross subsidy but also reduce AT&C losses.

Shri Sanjay Agarwal of Mussoorie Hotels Association, Shri Deepak Gupta of Hotel and Restaurant Association of Uttaranchal submitted that the department should use non-conventional energy sources like solar energy for power generation and encourage its consumers to install such technology by providing concession, so as to decrease the demand of purchasing the electricity at high cost by UPCL.

2.17.1.2Petitioner's Reply

The Petitioner submitted that the Commission may take a view on the suggestion of the consumer for the promotion of non-conventional energy in manufacturing unit.

The Petitioner submitted that the solar rooftop scheme is already implemented in the State and is governed by the UERC Solar Rooftop Regulations. Furthermore, the GoU is already providing various concessions for the consumers.

UPCL has been proactively procuring power from non-conventional sources to fulfil the renewable purchase obligation target for each year. UPCL is also in discussion with SECI, private developers and prosumers to procure solar power at cheaper rates. However, the generic tariff for private IPPs and rooftops is still high due to smaller capacities and higher financing costs. Therefore, the Petitioner has been cautiously expanding the energy portfolio to ensure that the average power purchase cost remains at competitive rates.

2.17.1.3Commission's Views

The Commission in order to promote Renewable generation vide its UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generation Stations) Regulations, 2018 dated September 06, 2018 has increased RPO Targets of the Petitioner substantiatlly which will increase procurement of power from RE Sources. Further, the matter of allowing any industries to set up a solar generating station is not a tariff related matter and is governed by UERC RE Regulations and any industries willing to install a solar plant may take necessary action in accordance with the RE Regulations and Policies of the State Government in this regard. For any dispute between the developer and the licensee, they approach the Commission for adjudication under the Act.

2.18 Power Procurement Plan

2.18.1.1Stakeholder's Comments

Shri Munish Talwar of M/s Asahi India Glass Ltd. has submitted that the power purchase expenses have been projected to increase by Rs. 311 Crore for FY 2020-21. The stakeholder submitted that the Petitioner is adjusting the revenue from sale of surplus power outside the State and has reduced the revenue from same for arriving at the total power purchase expense. The stakeholder further suggested that efforts should be made to increase procurement of power from State owned stations. The stakeholder also submitted that cost of free power should be adjusted in power purchase cost. The stakeholder further submitted that the consumers are unable to understand the rate at which power has been purchased from the existing details provided in the Petition.

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that UPCL should analyze the benefits of purchasing more power from gas based plants (Gama and Shravanti) as the cost of gas has come down in the past months. He further submitted that the power purchase expenses can be controlled by reducing Transmission and Distribution Losses.

Shri Sanjay Chaudhary of Bharatya Kisan Union, The District Advocate Association, Shri J.P. Nautiyal, Ex-President, Bar Council, Shri Rajendra Chaudhary submitted that maximum consumption is from State hydro projects which have a comparatively lower tariff, however, the tariffs are proposed to be increased.

Shri Sunil Kumar Gupta of Teesri Aankh ka Tehalka has submitted that high payment of fixed charges has been made by the Petitioner to Gas Based Power Plant without procurement of energy.

2.18.1.2Petitioner's Reply

A detailed power procurement plan for FY 2020-21 along with average power procurement rate from each station was submitted. Further, the Petitioner makes consistent efforts to reduce the power purchase cost and has proposed long term arrangements to meet majority of its power requirement for FY 2020-21. The cost of free power is determined as per the methodology prescribed by the Commission and considered in the Power Purchase Cost. Further, the revenue from sale of surplus power outside the State is adjusted in the power purchase cost for tariff purpose. The power purchase cost in Uttarakhand is one among the lowest and just below Himachal Pradesh due to cheap hydro generation available there.

With regard to procurement of energy from Gas power plants, the Petitioner submitted that it procures power from gas based plants based on its peak requirement. In the past years gas prices (variable cost) were high and, therefore, power was procured from those sources whose variable cost was less than the variable cost of gas plants. With gas prices expected to decline, UPCL has proposed to procure power from these stations at optimal cost.

With regard to procurement of energy from Hydro power plants, the Petitioner submitted that Uttarakhand has only about 30% generation from the State owned generating plants i.e. UJVNL to meet its demand. The power purchase cost of these plants is cheaper. The remaining 70% demand is met by procuring power from other sources which is costly. The Petitioner further submitted that the station wise availability of power alongwith cost of each power station has been provided in the ARR and Tariff Petition.

2.18.1.3Commission's Views

The issues related to source wise power purchase plan and costs have been deliberated by the Commission in Chapter 3 and 4 of this Order.

2.19 Capital Expenditure and Capitalization

2.19.1.1Stakeholder's Comments

Shri Munish Talwar of M/s Asahi India Glass Ltd. submitted that substantial expenses has been claimed under Admin & General expenses and similarly expenses like water charges, transportation freight and evaluation of land held under lease has been computed to project increased tariffs. He also submitted that separate allocation is approved for all expansions and new projects that are being funded by Government and regulatory bodies. He further submitted that Gross Fixed Assets and Financial plans states expenditure to the tune of Rs. 7468.43 Crore. The stakeholder submitted that claiming increased tariff rates on the pretext of above mentioned expenditures are unnatural.

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that UPCL is proposing to spend Rs. 1904 Crore in the year FY 2020-21 against the average capital expenditure of Rs. 335 Crore for the past 9 years. He submitted that these figures are proposed to increase the tariff for the consumers and, therefore, requested the Commission to scrutinize all these capital expenditures before allowing the same.

Shri Rajendra Chaudhary submitted that all the villages are electrified and only maintenance charges should be considered for Tariff Computation. The stakeholder suggested to seek plan for replacement of faulty meters.

Uttarakashi District Panchayat Association, Uttarkashi submitted that every Panchayat of Uttarkashi should be enhanced with its own captive hydro power dams and the issues in the power houses should be rectified. The stakeholder further submitted that the power supply should reach the Gram Panchayat and Quality of supply should be improved.

Shri Sunil Kumar Gupta of Teesri Aankh ka Tehalka has submitted that there is corruption during DPR stage of capital projects.

2.19.1.2Petitioner's Reply

The Petitioner submitted that it has been consistently implementing the Central Sector schemes during the 2nd control period which will also continue in 3rd control period. In case of Central schemes, the initial project cost is often revised based on ground level surveys and implementation plan. Therefore, the initial sanctioned project cost may vary from the financial closure of the scheme. The Petitioner has already achieved 100% physical progress under Saubhagya scheme, R-APRDRP Part-A and Part-B schemes.

With regard to village electrification, the Petitioner submitted that although the electrification has been done for all household consumers, capital works have to be undertaken for system upgradation, construction of new substations etc. The detailed capex plan has been submitted in the Petition. The recovery of this capital expenditure is required to be done alongwith financing of the same and regular repairs and maintenance of the assets created.

With regard to replacement of defective meters, the Petitioner submitted that all efforts are being undertaken to replace faulty meters with new meters in its jurisdiction. A total capital expenditure of Rs. 33.15 Crore has been proposed for FY 2019-20 and FY 2020-21 combined. 5,22,350 defective meters have been replaced during last 5 years.

With regard to improving quality of supply, the Petitioner submitted that it has proposed capital expenditure towards laying of cables, transformer augmentation etc. as part of the Petition. Significant efforts are being taken to improve the quality and reliability of supply.

With regard to the corruption, the Petitioner submitted that the accounts of the Petitioner company are audited by the Internal Auditors, Statutory Auditors under the Companies Act and Income Tax Act and the team of Comptroller and Auditor General of India. However, in case any misconduct is found, action is taken against the concerned employee / officer as per the prevailing rules and regulations.

2.19.1.3Commission's Views

The Commission has duly scrutinised the actual and proposed capitalisation for FY 2018-19, FY 2019-20 and FY 2020-21 in accordance with the provisions of UERC Tariff Regulations and the same has been discussed in Chapter 3 and 4 of the Order.

2.20 Other Expenses

2.20.1.1Stakeholder's Comments

Shri Sanjay Agarwal of Mussoorie Hotels Association, Shri Deepak Gupta of Hotel and Restaurant Association of Uttaranchal submitted that the Petitioner has not provided any basis for claiming of other expenses of Rs. 1065 Crore.

2.20.1.2Petitioner's Reply

The Petitioner submitted that the other cost projected by the Petitioner consists of all the costs such as Operation and Maintenance Costs, capex costs, Interest on Short term loans etc. which are legitimate cost of the Petitioner for undertaking new capex and ensuring smooth functioning and maintenance of existing assets. The methodology and assumptions for each of the costs has been provided in detail in the Petition for stakeholder's reference.

2.20.1.3Commission's Views

The Commission has duly scrutinised every cost element while carrying out the true up for FY 2018-19 and determining the ARR for FY 2020-21 in accordance with the provisions of UERC Tariff Regulations and the same has been discussed in Chapter 3 and 4 of the Order.

2.21 Return on Equity

2.21.1.1Stakeholder's Comments

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that UPCL comes out with new methodology for computation of Return on Equity, due to which the Return on Equity being claimed is on the higher side. He also submitted that the Commission has given clear principle for the computation of Return on Equity in its various orders. Therefore, the stakeholder requested the Commission to follow the principles as approved in the past.

2.21.1.2Petitioner's Reply

The Petitioner submitted that RoE has been submitted in accordance with the UERC MYT Regulations and on average equity which is as per the generally accepted accounting principles. The equity for FY 2018-19 has been computed considering closing equity approved by Commission in True-Up of FY 2017-18 in the previous order. On the same, capitalisation funded through equity is added and RoE is computed on an average basis.

2.21.1.3Commission's Views

The issue of Return on Equity has been deliberated by the Commission in Chapter 3 & 4 of this Order.

2.22 Arrears

2.22.1.1Stakeholder's Comments

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited have submitted that approximately 75% of the total arrears of the licensee are more than 3 years old and are difficult to be realized. The stakeholder also submitted that these arrears may be fictitious due to continued billing of consumers even after disconnection/ permanent disconnections. Further, the stakeholder submitted that the Petitioner has not given any time bound program to realize or waive the arrears.

Shri Tika Singh Saini of Bharatiya Kisan Union submitted that the bill paying consumer should not be burdened with the arrears of other consumers.

2.22.1.2Petitioner's Reply

The Petitioner submitted the action plan for recovery of electricity arrears which is as follows:

(i) Target for recovery of revenue of field units will be fixed after including the arrear amount.

(ii) Supply of defaulting consumers is being disconnected.

(iii)Camps are being organized for collection of revenue arrears.

(iv)Action shall be taken under Section 3 & 5 of the Uttarakhand (U.P. Government Electricity undertakings (Dues Recovery) Act, 1958) Adaptation and Modification order, 2002 for recovery of arrears.

(v) Verified bills of arrears shall be submitted to GoU and the matter will be pursued for payment of such arrear amount.

The Petitioner submitted that the revenue considered for computation of gap between ARR and revenue is the value of sale of electricity as per tariff approved by UERC. Accordingly, the burden of arrears generated due to non - payment of bills by some consumers is not passed on to the consumers who makes the payment of their bills.

2.22.1.3Commission's Views

The Commission has discussed the issue of long pending arrears and their recovery in subsequent Chapters of this Order.

2.23 Collection Efficiency

2.23.1.1Stakeholder's Comments

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited have submitted that the Petitioner's request to consider the normative trajectory rather than the actual collection efficiency while determining the revenue from sale of power is unjustified.

2.23.1.2Petitioner's Reply

The Petitioner submitted that it has achieved collection efficiency of 97.44% during FY 2018-19 as against the approved target of 99.00% by the Commission. However, the Petitioner has claimed the true-up for FY 2018-19 on the basis of approved collection efficiency. Further, the approved collection efficiency @ 99.05% for FY 2019-20 and 99.10% for FY 2020-21 has been considered for computation of the ARR.

2.23.1.3Commission's Views

The Commission has considered normative collection efficiency as specified in UERC Tariff Regulations for the purpose of tariff determination.

2.24 Metering and Billing Efficiency

2.24.1.1Stakeholder's Comments

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited, Shri Pramod Singh Tomar of M/s PSR Innovations LLP, M/s Khatema Fibres Limited have submitted that the Petitioner is not complying with the provisions of Electricity Supply Code Regulations by allowing only 2-3 days period for due date from the date of generation of bill instead of 15 days and the proposal to abolish grace date is highly opposed. Further, the billing software should be modified to automatically fix the due date and grace period on the bill generation for payment without attracting delayed payment surcharge.

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that the bills are mostly received after due date. Therefore, the grace period of 15 days for making payments of bills may be continued as in the past.

M/s Ambashakti Glass India Pvt. Ltd submitted about the discrepancy in the due date displayed in their online bill and hardcopy of the bill.

Shri Tika Singh Saini of Bharatiya Kisan Union submitted that the meter readings should be taken properly.

Shri Inderjeet Malhotra submitted that the main cause of revenue loss is due to the careless working of the private contractors. Therefore, the stakeholder suggested the Commission to conduct an independent survey under its direction regarding meter reading by private contractors.

The District Advocate Association, Uttarkashi, Shri Ramesh Chauhan of Nagar Vyapas Mandal, Uttarkashi, and Shri Vijay Singh Verma submitted that the billing cycle for domestic consumers should be on a monthly basis so as to reduce the burden on domestic consumers.

Shri Katar Singh submitted that the billing cycle should be done as per Rules and Regulations which will have impact on the revenue collection by 30%. The stakeholder further submitted that on-spot billing should be preferred.

Shri Vijay Singh Verma has submitted that the Automatic Meter Reading system should be provided for PTW connections so that billing efficiency can be improved.

Shri Rajendra Chaudhary submitted that 20-25% of consumers are suffering due to improper meter reading and suggested replacement of faulty meters.

2.24.1.2Petitioner's Reply

The Petitioner has submitted that as per the Commission's directions, they are regularly allowing 15 days grace period beyond the due date to the consumers. In this connection, the Petitioner submitted that it has improved its billing and distribution system tremendously, the details of which are as follows:

a) At the time of passing of order by the Commission allowing the grace period, the entire billing of the Petitioner was outsourced to the agencies situated in Meerut & New Delhi. Now the entire billing is in-house, and the billing system is established at Corporate Office.

b) For almost all domestic consumers having load upto 25 kW, billing is either being done through Spot Billing Machine (SBM) or through mobile based billing where on the spot delivery is given after the generation of the bills at site. So, there is no delay in delivering such bills.

c) For system generated bills of other categories (key consumers), bills are generated through Petitioner's software and instant SMS is sent to the consumers on generation of the bills. This billing is also made available on the website of the Petitioner from where consumers can download their own bills. Bills are also delivered through e-mail and in hardcopy to these consumers.

Hence, keeping in view the improvement in the billing and bill distribution system, the Petitioner has proposed to abolish the grace period as the consumer is notified about the bill well in advance through various channels.

With regard to the discrepancy in the bill, the Petitioner submitted that the bills provided online and delivered in hard copy are the same. However, in case of any such discrepancy, the Executive Engineer of the concerned Electricity Distribution Division may be approached who will resolve the issue.

With regard to the meter reading by private agencies, the Petitioner submitted that presently, there is shortage of manpower and, therefore, the meter reading is being done through outside agencies. However, with a view to reduce the human intervention in meter reading, automatic Meter Reading for high value consumers and android based billing has been introduced which has resulted in improvement in billing and reduction in consumer complaints.

With regard to billing cycle, the Petitioner submitted that the monthly billing of the domestic consumers having load above 4 kW has been started from the month of October, 2019. The efforts are being made to convert all the remaining bi-monthly billing of domestic consumers into monthly billing from April, 2020.

2.24.1.3Commission's Views

The Commission has taken note of various suggestions received from the stakeholders regarding improvement in metering and billing and the Commission has directed UPCL to consider the suggestions given by the stakeholders to improve its metering and billing system in subsequent Chapters of this Order.

Further, with regard to grace period, the Commisision has discussed the issue in detail in Chapter 5 of the Order.

The Commission has also noted the submission of the Petitioner with regard to implementation of monthly billing for all domestic consumers.

2.25 Provision for Bad & Doubtful Debts

2.25.1.1Stakeholder's Comments

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited have submitted that arrears accumulated due to continued billing of consumers even after disconnection should be classified as bad debts and needs to be removed from books of account. The stakeholders also submitted that the provision of only such debts should be considered in ARR of the Licensee.

Shri Tika Singh Saini of Bharatiya Kisan Union and Shri Jagdish Bhandari submitted that the debts of the discoms due to inefficiency should not be passed on to the consumers.

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that neither the Commission has fixed any norm for Bad & Doubtful debts nor the UPCL has written off the bad debts as per the transparent policy approved by the Commission. He further submitted that there is no provision allowed for bad debts. He also submitted that utmost care has to be taken while dealing with bad and doubtful debts as UPCL is a public as well as a commercial entity.

2.25.1.2Petitioner's Reply

The Petitioner sumitted that Reg. 31(1) of the UERC MYT Regulations, 2018 with respect to the provisions of bad debts specifies as under:

> "*the Commission may allow a provision for bad and doubtful debts upto one percent (1%) of the estimated annual revenue of the distribution licensee, subject to actual writing off of bad debts by it in the previous years.*"

Since the Petitioner has initiated actual writing-off of bad debts, it has requested allowing the same as a part of ARR in future years.

2.25.1.3Commission's Views

The issue of the provision for Bad & Doubtful debts has been deliberated by the Commission in Chapter 3 and 4 of the Order.

2.26 Tariff Structure

2.26.1.1Stakeholder's Comments

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited, Shri Pramod Singh Tomar of M/s PSR Innovations LLP, M/s Khatema Fibre Limited have requested the Commission to reject the proposal of reducing the number of slabs in domestic category (RTS-1) from 4 to 2 as it deprives the benefit of lower & medium slab rates to the consumer. The stakeholder also submitted that the existing slabs provide benefit of lower & higher energy rates of the tariff up to 400 units.

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited have submitted that the proposal to merge independent advertisement hoardings with non- domestic category up to 25 kW load having fixed charge at Rs. 75 per kVA & energy charge at Rs. 4.25 per kVAh needs to be rejected. The stakeholder also submitted that the registered charitable trusts under RTS-2 sub-category 1.1 (iii) should be merged with general non-domestic category.

Shri Vijay Singh Verma submitted that the tariff structure should be simplified by merging the existing tariff structure of 0-100, 101-200 units per month to 0-200 units.

Shri Rajendra Chaudhary submitted that all categories of consumers should be charged the same and slab-wise categorization should be abolished.

2.26.1.2Petitioner's Reply

The Petitioner submitted that in accordance with the Draft Amendments in the Tariff Policy, they have tried to simplify the existing tariff structure. The Draft Amendment stipulates to simplify the tariff structure to limit the number of categories along with the slabs so that the tariff prudently reflects the cost of supply. Hence, UPCL has proposed reduced number of slabs/sub-categories which also results in easy comprehension of the tariff schedule by a consumer.

With regards to slab-wise tariff structure, the Petitioner submitted that as against the existing four slabs (0 to 100 units, 101 to 200 units, 201 to 400 units and above 400 units p.m.) in domestic category, only two slabs (0 to 100 units and above 100 units p.m.) have been proposed for FY 2020-21. Hence, the Commission may take a view on the request of the consumer.

2.26.1.3Commission's Views

The Commission has gone through the suggestions of the stakeholders and has duly considered the same while designing and rationalising the tariff and has discussed the issues in detail in Chapter 5 of this Order.

2.27 Department Employees and Pensioners

2.27.1.1Stakeholder's Comments

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited have submitted that Department Employees and Pensioners are consuming unlimited amount of electricity on payment of nominal fixed charges generally deducted from their pay/pension and are not being accounted and billed properly. Therefore, the

Commission may direct UPCL to bill such consumers in domestic category and provide rebate as decided on the total bill in order to facilitate proper energy accounting and billing of this category.

Shri Tika Singh Saini of Bharatiya Kisan Union submitted that the electricity consumption of department employees are not being accounted and billed properly.

Shri B P Maithani, President of RTI Club Uttarakhand submitted that free electricity to Departmental Employees should be discontinued. The consumption of this category is not being monitored, accounted and billed properly.

Hotel Association, Mussorie submitted that the wastage of electricity in the department offices have to be minimized. The stakeholder further submitted that the energy charges should be charged from the exising and the retired employees of the organization.

Shri Arvind Jain, Shri Kuldeep Singh submitted that the concession given to the departmental employees should be reduced so as to reduce the burden on the consumers.

2.27.1.2Petitioner's Reply

The Petitioner submitted that the employees of UPCL are being given the facility of departmental electricity connection since U.P. State Electricity Board was in existence. Under this facility, a fixed lump-sum amount is charged from the employees according to their designation towards electricity charges for electricity supplied to them. Erstwhile UPSEB was unbundled under the provisions of Uttar Pradesh Electricity Reforms Act, 1999 and Section 23(7) of the said Act provides that "terms and conditions of service of the personnel shall not be less favorable to the terms and condition which were applicable to them before the transfer". The same spirit has been echoed under first proviso of section 133(2) of the Electricity Act, 2003. The benefits for employees/pensioners as provided in Section 12(b)(ii) of the Uttar Pradesh Reform Transfer Scheme, 2000 include "concessional rate of electricity", which means concession in rate of electricity to the extent it is not inferior to what was existing before 14th January, 2000. The rates and charges indicated above for this category are strictly in adherence to the above statutory provisions. As UPCL is the successor entity of UPPCL (formed as a result of unbundling of UPSEB), the above legal provisions are also applicable on it (UPCL).

The Petitioner further submitted that in the previous Tariff Orders, the Commission has not been allowing the impact of concessional supply to departmental consumers including pensioners of UPCL, UJVN Ltd. and PTCUL and has been considering revenue corresponding to the ABR of domestic consumers.

The Petitioner also submitted that it is in the process to impose limit of electricity consumption on the departmental electricity connections released to the employees, pensioners and family pensioners. The consumption over and above this limit shall be charged at rates as specified for normal domestic consumers.

2.27.1.3Commission's Views

The Commission has taken note of the submissions of the stakeholders and the Petitioner. The Commission would like to clarify that in the previous Tariff Orders, the Commission had not been allowing the impact of concessional supply to departmental consumers including pensioners of UPCL, UJVN Ltd. and PTCUL and has been considering revenue corresponding to the ABR of domestic consumers and the same approach has been adopted while carrying out the truing up for FY 2018-19. The Commission vide its Tariff Order dated 21.03.2018 has also directed the Petitioner to bill all departmental employees on the basis of rates approved for RTS-1 Domestic Category from April 01, 2018 and also show the concession extended to the departmental employees by way of charging lower rates separately as its cost.

As regards the concession provided to these consumers, the Petitioner is once again directed to show the same separately as expenses in its accounts failing which action may be initiated against it.

2.28 Consumer Security Deposit

2.28.1.1Stakeholder's Comments

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry have submitted that UPCL's bills should be secured through bank guarantee as Industrial consumers finds it difficult to arrange security in the form of cash.

M/s KVS Castings Private Limited have submitted that at present security equal to two months average billing in a financial year is required by UPCL in cash. The security is for the purpose of securitization of UPCL's bill in case of default. Industrial consumers pay initial security

@ Rs 1000/- per kVA at the time of connection in cash and thereafter on year to year basis as per above criteria.

2.28.1.2Petitioner's Reply

The Petitioner submitted that as per Section 47(4) of the Electricity Act, 2003, the Distribution Licensee is required to pay interest on the security deposit. As interest cannot be paid on the money held with UPCL as Bank Guarantee / Letter of Credit, the security deposits should only be in the form of cash / bank draft.

Regarding the amount of Security Deposit, the Petitioner submitted that once the supply is drawn by a consumer the bill is generated after a period of 1 month. In 15 days, the bill is received by the consumer and again thereafter, 15 days time is given for payment. Thus, a 2 month period is justifiable and is also in accordance with the UERC Supply Code.

2.28.1.3Commission's Views

The Commission is of the view that the issues raised regarding mode of payment of Security Deposit are governed by the provisions of the Supply Code Regulations and, hence, cannot be modified through Tariff Order.

2.29 Change of Supply Voltage on Marginal Load Enhancement by consumers

2.29.1.1Stakeholder's Comments

Shri Ashok Bansal of M/s Kumaun Garhwal Chamber of Commerce & Industry, M/s KVS Castings Private Limited have submitted that in existing tariff regulations, no margin has been provided for the consumers requiring enhancement of load marginally and in case of even slight enhancement of load beyond the above threshold limit, the consumers have to shift to higher supply voltage which necessarily requires changing of all existing power supply equipment/ apparatus installed by the consumer for the existing supply voltage. The stakeholder further requested the Commission to consider this matter and allow such consumers to avail certain percentage of load enhancement without going into higher supply voltage category.

2.29.1.2Petitioner's Reply

The Petitioner submitted that the issue is governed by the provisions of the UERC (The Electricity Supply Code) Regulations, 2007 and can be considered only at the time of amendment in the said Regulations.

2.29.1.3Commission's Views

This matter pertains to Supply Code and is to be dealt in accordance with the provisions of the Supply Code.

2.30 Law Cells

2.30.1.1Stakeholder's Comments

Shri Pramod Singh Tomar of M/s PSR Innovations LLP, M/s Khatema Fibres Limited submitted that Law Cells has to be established to resolve the problems of the consumers instead of raising the issue to the Court which entails a delayed procedure. He further submitted that this initiative can help the electricity department as well as the consumers and would save unnecessary expenses in the Court.

2.30.1.2Petitioner's Reply

The Petitioner has not submitted specific reply to the issue raised.

2.30.1.3Commission's Views

The consumer grievance redressal procedure has been established in accordance with the provisions of Electricity Act 2003 and are also governed by the UERC (Guidelines for Appointment of Members and Procedure to be followed by the Forum for Redressal of Grievances of the Consumers) Regulations, 2007 and subsequent amendments thereof alongwith the timeframe in which the matter has to be disposed off.

2.31 CGRF

2.31.1.1Stakeholder's Comments

Shri Pramod Singh Tomar of M/s PSR Innovations LLP, M/s Khatema Fibres Limited, has submitted that the Consumer Grievance Redressal Forum has been established by UPCL to register complaints from consumers. However, this forum is a wing of the Corporation itself and despite this, the decision of the forum is challenged by UPCL in High Court/Supreme Court. In case a decision of CGRF is challenged in apex court, it should be ensured that pending decision of the apex court, the decision of the CGRF is implemented and in case the decision is overturned by the apex court, UPCL may recover compensation against the same from the consumer. This shall ensure that the consumer does not need to bear the burden of legal proceedings.

2.31.1.2Petitioner's Reply

The Petitioner submitted that CGRFs have been established by UPCL in accordance with the provisions of Section 42 (5) of the Electricity Act, 2003 and Rules and Regulations issued in the matter. As regards challenging the decision of CGRF, it is submitted that action is taken by UPCL in the matter as per provisions of law.

2.31.1.3Commission's Views

The Commission has noted the submissions of the stakeholder. The Commission would like to clarify that the appointment of Members of CGRF are governed by UERC (Guidelines for Appointment of Members and Procedure to be followed by the Forum for Redressal of Grievances of the Consumers) Regulations, 2007 and subsequent amendments thereof and any order of CGRF shall be implemented in accordance with law unless set aside by higher courts.

2.32 Provision of Subsidy

2.32.1.1Stakeholder's Comments

B P Maithani, President of RTI Club Uttarakhand submitted that no relief is being provided by Uttarakhand Government and requested to grant similar subsidy like in Himachal Pradesh. He further submitted that the cost of electricity can be curtailed by amalgamating the three power sector entities under one management.

The District Advocate Association, Uttarkashi submitted that the resident's average annual income in Uttarakhand is very less as compared to that of Himachal Pradesh, even though the geographical conditions are identical. Therefore, the stakeholder requested the Commission to grant similar subsidy of 50% in electricity bills like in Himachal Pradesh.

2.32.1.2Petitioner's Reply

The Petitioner submitted that UPCL is a commercial organization and is required to meet its Annual Revenue Requirement out of the revenue realized from the consumers through electricity tariffs. The revenue deficit for FY 2020-21 at existing tariff has been estimated at Rs. 543.83 Crore (Rs. 7606.20 Crore – Rs. 7062.37 Crore) for which an overall tariff hike of 7.70% is required. As against the average tariff hike of 7.70%, a tariff hike of 11.84% for Domestic, 9.87% for Non Domestic, 5.53% for PTW, 8.78% for LT Industry and 5.66% for HT Industry has been proposed.

The Petitioner further submitted that in case State Government wants to give any concession to any category, it may give direct subsidy to that category as provided under Section 65 of the Electricity Act, 2003.

2.32.1.3Commission's Views

The Commission is of the view that subsidy is a State prerogative and the consumer may approach State Government for relief.

2.33 KCC Data

2.33.1.1Stakeholder's Comments

Shri Pankaj Gupta of Industries Association of Uttarakhand suggested that the Commission may set up a cell for scrutinizing the KCC data which should be independent. He also submitted that this initiative will help in proper diagnostics of ills and mala fides prevailing in UPCL at division level and also will highlight the vital areas to be settled.

2.33.1.2Petitioner's Reply

The Petitioner submitted that the MRI report and billing of the HT consumers are being checked at Corporate Office on regular basis. Corrective actions are being taken on the irregularities found in the checking of the metering system and billing of these consumers.

2.33.1.3Commission's Views

As regards the suggestion for scrutiny of KCC data, the Commission directs UPCL to constitute a cell in its commercial wing for analysis and monitoring of KCC data including low load factor cases, meter tamper cases etc. The Commission directs UPCL to submit the report on analysis and monitoring of KCC data on monthly basis by 15th of every month.

2.34 Tariff for Cane Crusher

2.34.1.1Stakeholder's Comments

Shri Vijay Singh Verma submitted that under the RTS-4, cane crusher connection should be separated from PTW connection. It should be included under the permanent category and prepaid meter should be installed. He further submitted that the licensee must be intimated by the consumers whenever the crushing starts and stops.

2.34.1.2Petitioner's Reply

The Petitioner submitted that the Commission may take a view in the matter.

2.34.1.3Commission's Views

The cane crushers are covered under Rate Schedule RTS-4 as per the terms and conditions provided in the Rate Schedule. The same is not a permanent activity and is for incidental agricultural processes.

2.35 Theft and Provision of Street Lighting

2.35.1.1Stakeholder's Comments

Shri B P Maithani, President of RTI Club Uttarakhand submitted that blocking the misuse and plugging the leakage of funds ensure better recovery of approved ARR. The stakeholder further submitted that there are positive and desirable ways of raising resources such as by limiting irrational extension of both medical and reimbursement facility, loss of rebate due to delayed payment of power purchase bills, preventing power theft and generation of revenue from other sources such as use of electric poles by cable TV companies etc. instead of rising tariff every time.

Shri Vijay Singh Verma submitted that the street lights in the rural area should be maintained properly by UPCL or Gram Sabha as it turns out to be the source of theft.

Shri Arvind Jain submitted that theft of electricity is increasing in hilly areas, further no meter reading is being taken.

Shri Ram Kumar Goel of Hotel Association submitted that theft of power should be controlled.

Shri Rajendra Chaudhary submitted that theft of power in the Commercial sector is burdening the consumers.

2.35.1.2Petitioner's Reply

The Petitioner submitted that following action is being taken for reduction of distribution losses:

a) Vigilance raids are being conducted and cases are being registered under Section 126 and 135 of the Electricity Act, 2003. Legal proceedings are being initiated against the person(s) who is found indulging in theft of electricity.

b) Mechanical meters are being replaced by electronic meters.

c) Defective Meters are being replaced.

d) LT ABC is being laid in theft prone areas.

e) Automatic Meter Reading is being done of high value consumers.

f) Android based billing has been introduced for improvement in Billing Efficiency.

The Petitioner submitted that the responsibility to operate and maintain the street lights lies with the Municipal Corporation (local body) of respective cities on which UPCL has no jurisdiction.

With regards to meter reading in hilly areas, the Petitioner submitted that efforts are being made to issue the bills only on meter reading basis. However, sometimes reading is not possible due to premises being locked and sometimes UPCL's staff does not reach the premises of the consumers for taking reading. However, efforts are being made for ensuring 100% meter reading.

2.35.1.3Commission's Views

The Commission has taken note of the concerns raised by the stakeholders and the initiatives taken by UPCL for reducing the theft and losses.

With regard to Public Lamps, the Commission is of the view that street lighting/public lamps system is the responsibility of the local bodies namely Municipal Corporations, Nagar Palika, Nagar/Village Panchayats etc. and these local bodies have elected public representatives as their heads and the staffs in these bodies are primarily Government employees. In case local bodies decides to handover operation & maintenance of the above system to UPCL, it conducts the operation and maintenance of street light/public lamp system as an agency to these local bodies and material cost incurred is borne by these local bodies while UPCL is entitled for labour charges to be recovered from these local bodies. It is for these bodies and the Government to decide amongst themselves as to who would be making payments for electricity consumed by them.

2.36 New Connections

2.36.1 *Stakeholder's Comments*

Shri Arvind Jain submitted that the information on charges applicable for new connections by consumers are not available.

2.36.1.1Petitioner's Reply

The Petitioner submitted that the said information is available in the UERC (Release of New LT Connections, Enhancement and Reduction of Loads) Regulations, 2013.

2.36.1.2Commission's Views

This matter pertains to Supply Code, however, the UERC (Release of New LT Connections, Enhancement and Reduction of Loads) Regulations, 2013 explicitly provides the charges applicable for new LT connections and UERC (Release of New HT Connections, Enhancement and Reduction of Loads) Regulations, 2008 provides the charges applicable for new HT connections.

2.37 Others

2.37.1.1Stakeholder's Comments

Shri Pramod Singh Tomar of M/s PSR Innovations LLP, M/s Khatema Fibres Limited submitted that shift in the billing unit from kWh to kVAh for the contracted load of 10 kW to 25 kW may make the consumers uncomfortable who lack technical knowledge.

Shri Ram Kumar Goel of Hotel Association, Mussorie submitted that all the charges should be calsulated based on kWh rather than kVA. The stakeholder further submitted that the funds provided by the Government should be properly utilized.

Uttarakhand District Panchayat Association submitted that employee recruitment should be given priority and vacancies needs to be filled in timely manner for the smooth operation of Discoms.

Shri Arvind Jain submitted that the facility of on job training should be available to employees of UPCL. The stakeholder further submitted that connection should be granted after proper verification of documents. The stakeholder also submitted that consumers should be rewarded for identification of thefts.

Shri Sunil Kumar Gupta of Teesri Aankh ka Tehalka has submitted that seeking of public comments by UPCL should be done periodically.

2.37.1.2Petitioner's Reply

The Petitioner submitted that this proposal was made in the previous year's Petition, however, in the current Petition no such proposal has been submitted.

The Petitioner has proposed a manpower addition plan in the Petition to fill the vacancies. The recruitment process for the same are under various stages of approval and have been submitted in the Petition.

The Petitioner submitted that training on various subjects is being regularly provided by UPCL to its employees. UPCL provides the connection to the consumers in accordance with the provisions of Regulations issued by the Commission in the matter. UPCL vide its O.M dated

11.05.2012 has already introduced an incentive scheme. As per this scheme, the informer of theft case is given a maximum incentive of Rs. 50,000 /-.

With regard to seeking of public comments, the Petitioner submitted that the Commission may take a view on this matter.

2.37.1.3Commission's Views

The Commission has dealt with the various issues raised in the subsequent sections of this Order. The Commission always seeks comments from all the stakeholders in any matter affecting them and will continue doing so.

2.38 Views of State Advisory Committee

During the State Advisory Committee Meeting held on March, 16, 2020, the Members made the following suggestions on the True Up Petition for FY 2018-19, APR for FY 2019-20 and Determination of Tariff for FY 2020-21.

a) Tariff increase proposed by UPCL should not be considered as the existing tariff is already on the higher side.

b) The Commission needs to take the appropriate view on distribution losses and direct UPCL to prepare the concrete action plan for reducing the distribution losses. Members suggested to use the Data Analytics tools and techniques for analysing and reducing the distribution losses. UPCL should also adopt certain best practices to reduce the losses.

c) UPCL is only adjusting the revenue in their system and corresponding adjustment is not done in sales due to which the actual distribution losses are under-estimated.

d) UPCL's proposal of abolishing Grace period of 15 days should not be considered till the issues related to current billing mechanism are resolved. UPCL should ensure that bills ar delivered to the industrial and other consumers through email in a timely manner.

e) UPCL needs to recover their outstanding dues with proper planning, so that other consumers who are paying timely are not burdened for non-recovery by UPCL.

f) UPCL should settle the billing issues with the Municipal bodies towards bills for Public Lamps.

g) UPCL should ensure billing of Electricity consumed in their own offices and to the departmental employees in accordance with the directions of the Commission.

h) The reasons for reduction in sales of PTW consumers in FY 2018-19 with respect to FY 2017-18 by about 32.50% despite the increase in number of consumers may be examined.

i) UPCL is only adjusting the incorrect revenues in their system and corresponding adjustment is not done in sales due to which the actual distribution losses are under-estimated.

j) Variation in the trends of approved and actual Industrial Consumption and the corresponding Average Billing Rate should be examined for FY 2018-19.

k) Morning Peak hours should be abolished or should be fixed in such a manner that the single shift industry gets clear 8 hours (plus one-hour break) for continuous operation at normal tariffs.and the Commission should also carry out Impact Assessment of the current TOD Tariff Structure to assess as to whether the ToD tariff structure is benefitting the system or not.

l) UPCL should purchase power from Gas Generating Stations as there is reduction in gas prices and benefits of the same should be passed on to the consumers.

m) UPCL should submit the Electrical Inspector certificates for the schemes capitalised and only then the capitalisation should be allowed.

n) Snow bound tariff should be implemented at the earliest.

o) UPCL should clearly mention the source of money invested in Fixed Deposits as the same also includes the Security Deposits made by the Consumers.

p) Organisational Structure of the utilities should be reviewed considering the actual requirement of the staff and the utilities should submit the Cost Benefit Analysis along with the recruitment plan.

q) Transmission and Distribution Utilities of the State can be merged to save the manpower costs.

r) UPCL should collect the revenue from the users of its Electricity poles installed across the State as per the existing rates decided by the GoU.

s) Utilities should ensure proper infrastructure in snow bound areas/hilly terrain with minimal impact on eco system.

t) Merging/Reduction of Tariff slabs should be considered only if it benefits the consumers of the State.

u) The Commission can consider an increase in fixed charges and reduction in energy charges without much change in Tariff so that the reliability of supply is maintained by UPCL.

v) There is a need to relook the the cost of free power being paid to the State Govt., which is very high considering various levies by State Govt viz. Electricity Duty and Green Cess.

w) Consultation Forum should be constituted including officers of Utilities, Regulatory Commission, representative of industries and representatives of other stakeholders to discuss the issues related to Uttarakhand power sector.

x) Transparency should be maintained in all the respects for the due process of tariff determination by all the Utilities.

y) Repetitive claims on issues for which the Commission has already taken a view in its earlier Orders is unjustified by the Utilities.

z) Form 16A are not being issued by UPCL on time for TDS deducted on interest.

aa) Fines and penalties levied on UPCL should not be passed through in tariffs.

bb) UPCL is not providing earth wire in new connections. Similarly, new poles are being installed without Stay which is risky.

2.38.1.1Petitioner's Reply

The Petitioner submitted the following replies

a) UPCL justified the proposal of abolition of Grace period as the payments for power purchase from various generators has to be made in order to avoid late payment surcharge.

b) With regard to realization of outstanding debts, UPCL submitted that the matter is being pursued by its Officers and in case of M/s IDPL the matter is being looked into as per Sections 3 & 5 of Revenue Act.

c) With regards to settling of billing issues with Municipal bodies, UPCL submitted that the same are being looked in to by its Officers and have been settled in most of the Municipal bodies except Dehradun and Haldwani.

d) As regards supply of electricity to employees, the matter is sub-judice. UPCL further submitted that the meters of all the employees are functional.

e) On the issue of carrying out the impact analysis of TOD tariff structure, UPCL submitted that the Commission may take appropriate view in the matter.

f) Power purchase from Gas stations is being made and the benefits will be passed on to the consumers of the State.

g) With regards to Fixed Deposits, UPCL submitted that it does not have any fixed deposits made from its own funds and all the fixed deposits are on account of Security Deposits made by the consumers.

h) With regards to observation on organizational structure and proposal of new Employees, UPCL submitted that the sanctioned strength is around 8000 whereas the Utility is operating with around 2000 employees.

i) With regards to realization of revenue for utilisitng UPCL network, UPCL submitted that around Rs. 20-25 Crore are recovered as per the rates prescribed by GoU from telecom operators whereas the amount to be recovered from Cable Operators is being discussed.

j) UPCL welcomed the suggestion of Consultative forum made by the members of SAC.

2.38.1.2Submissions made by Additional Secretary (Revenue) and Additional Secretary (Energy), Govt. of Uttarakhand:

Additional Secretary (Revenue) and Additional Secretary (Energy), Govt. of Uttarakhand informed during the meeting that the Government is in process to issue the notification w.r.t. Snow Bound Areas and the same will be issued by next month. Additional Secretary (Energy), Govt. of

Uttarakhand also submitted that the suggestions regarding review of Organisation Structure will be appropriately considered.

2.38.1.3Commission's Views

The issues raised by the Members of the Advisory Committee have been taken into consideration while deciding on the Petitioner's claims in the Petition filed for approval of Truing Up for FY 2018-19, APR for FY 2019-20 and Determination of Tariff for FY 2020-21 as detailed in subsequent Chapters of this Order. Constitution of Consultation Forum is a good suggestion and the Commission will take appropriate view including composition of the same after the tariff proceedings.

Further, UPCL is directed to ensure issuance of Form 16A, wherever applicable, in a timely manner so that the consumers can claim the same while filing their Income Tax Returns. UPCL is also directed to ensure compliances of the other suggestions of the Members of the Advisory Committee pertaining to its functions and operations and report compliance on the same latest by June 30, 2020.

3. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing Up for FY 2018-19

3.1 Truing-up for FY 2018-19

Regulation 12(3) of the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2015 specifies as under:

"(3) The scope of the Annual Performance Review shall be a comparison of the actual performance of the Applicant with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of following:

a) A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;

b) Categorisation of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (un-controllable factors).

c) Revision of estimates for the ensuing financial year, if required, based on audited financial results for the previous financial year;

d) Computation of the sharing of gains and losses on account of controllable factors for the previous year."

The Petitioner submitted that the Commission vide its Order dated March 21, 2018 had approved the expenses and revenues of the Petitioner for FY 2018-19 based on the UERC Tariff Regulations, 2015, the historical trends and the revised projections of the Petitioner. Subsequently, aggrieved by the Commission's MYT Order dated March 21, 2018, the Petitioner filed a review Petition dated May 21, 2018 on the grounds that there were some inadvertent errors in the Order. The Commission passed the review order dated August 13, 2018, wherein the Commission rejected the review on all the grounds filed by the Petitioner.

The Petitioner filed another Petition seeking recovery of power purchase cost incurred in excess of the power purchase cost approved for FY 2018-19. The Commission vide its Order dated

October 25, 2019 allowed recovery of Rs. 295.95 Crore from consumers of the State during 01.10.2019 to 31.03.2020.

The Commission has analysed the head-wise elements of ARR and revenue for FY 2018-19 in the succeeding paragraphs. The head-wise details of variations in expenses and revenues are enumerated below.

3.1.1 *Sales*

The Commission had approved the energy sales for FY 2018-19 in its Tariff Order dated March 21, 2018 as 11853.72 MU. The Petitioner in the current Petition has submitted the actual sales for FY 2018-19 as 11826.68 MU and further submitted that as the Petitioner has metered all the unmetered consumers and no sales have been recorded in the billing ledger against the unmetered consumers, hence, there is no need of re-casting of sales for FY 2018-19.

The Commission continuing with its earlier approach, directed the Petitioner to submit the breakup of sales for all the consumer categories into two parts, i.e. sales based on actual meter reading and sales billed on provisional/assessment basis for FY 2018-19 during the current proceedings. In reply to the Commission's directions, the Petitioner submitted the following:

Table 3.1: Break up of Sales submitted by the Petitioner for FY 2018-19 (MU)

S. No.	Sub-Category	Based on Actual Meter Reading			Based on Assessment			Total		
		No. of Consumers (No)	Connected Load (KW)	Sales (MU)	No. of Consumers (No)	Connected Load (KW)	Sales (MU)	No. of Consumers (No)	Connected Load (KW)	Sales (MU)
1.	**Domestic**									
(i)	**BPL and Kutir Jyoti**	384651	386338	214.35	13847	13856	7.53	398498	400194	221.88
(ii)	**Other Domestic Consumers**	1657848	2584956	2463.14	60027	93596	89.19	1717875	2678552	2552.33
(iii)	**UPCL Employees and Pensioners**	5363	15462	19.12	404	1165	1.44	5767	16627	20.56
(iv)	**UJVNL Employees and Pensioners**	1372	3053	5.93	114	254	0.49	1486	3307	6.42
(v)	**PTCUL Employees and Pensioners**	442	1148	2.59	38	99	0.22	480	1247	2.81
(vi)	**Single Point Bulk Supply**	113	32864	45.2	0	0	0	113	32864	45.2
	Total Domestic	**2049789**	**3023821**	**2750.33**	**74430**	**108970**	**98.87**	**2124219**	**3132791**	**2849.2**
2.	**Non-domestic**	242314	1032301	1267.26	7546	25430	31.22	249860	1057731	1298.48
3.	**PTW**	32302	174958	176.82	2431	13169	13.31	34733	188127	190.13
4.	**LT Industry**	10533	216637	303.52	223	4579	6.42	10756	221216	309.93
5.	**Public Lamps**	1827	16930	47.89	49	450	1.27	1876	17380	49.16
6.	**Govt. Irrigation System**	1793	64161	150.43	48	1706	4	1841	65867	154.43
7.	**Public Water Works**	1736	98378	400.43	46	2616	10.65	1782	100994	411.08
8.	**HT Industry**	2100	1678375	6355.76	0	0	0	2100	1678375	6355.76
9.	**Mixed Load**	75	54612	177.75	0	0	0	75	54612	177.75
10.	**Railway Traction**	2	15000	27.91	0	0	0	2	15000	27.91
11.	**Other State Supply**	5	900	2.86	0	0	0	5	900	2.86
Total		**2342477**	**6376074**	**11660.96**	**84772**	**156919**	**165.73**	**2427249**	**6532993**	**11826.68**

The Commission from the above data observed that the sales submitted on the basis of assessment was only 1.4% of the total sales and the assessed connections were 3.41% of the total connections, however, from the Meter exception report submitted separately by UPCL, it was observed that the average percentage of NA/NR/IDF/ADF/RDF was about 13%. The Commission vide its letter dated February 12, 2020 sought justification from the Petitioner for the observed anomaly in the data submitted. The Petitioner in its reply dated February 19, 2020 submitted that the commerical diary was being prepared by the field units and they had expressed their inability to separate the metered sales and assessed sales and, therefore, the metered sales and assessed sales had been estimated at Corporate Office and in the estimation only IDF sales were considered for derivation of assessed sales. The Petitioner further submitted that in NA/NR cases, the sales is assessed on provisional basis and when the meter reading is taken in such cases the assessed sales is withdrawn and only sales as per meter reading exists and, hence, such cases have not been considered for derivation of assessed sales. The Petitioner further submitted that for RDF cases the reading is corrected after checking the meter and, therefore, such cases were also not considered for derivation of assessed sales.

The Commission has gone through the submissions of the Petitioner and is of the view that the practise followed by the Petitioner is not prudent. The Commission is unable to comprehend how estimation of assessed sales has been done by the Corporate Office when the same is carried out at divisional level. The Commission also does not find any merit in the difficulty expressed by the Petitioner that the field officers are incapable of segregating assessed sales specially when the very field officers provide monthly data on number of meters for which bills were raised on the provisional basis namely NA/NR/IDF/ADF/RDF. **The Commission directs the Petitioner to record all the sales on the assessement basis from FY 2019-20 in proper format with supporting documents which shall be scrutinised in future tariff filings and inability to furnish such data will attract appropriate action under the Act.**

The Commission in its Tariff Order dated March 21, 2017 had analysed the division wise commercial statement for FY 2015-16 and observed that like previous years, the average billing rate (ABR) of certain categories of consumers in some divisions were even less than the energy charge approved for that category and had directed the Petitioner as follows:

"The Commission re-iterates its direction and provides final opportunity to UPCL to rectify such errors and, accordingly, directs UPCL to rectify such anomalies else the Commission would examine the matter and if required necessary corrections to this extent would be made in the subsequent years. Further, the Zonal Chiefs, the Circle Chiefs and the concerned Executive Engineers are hereby directed to examine the data with reference to their Divisions for FY 2014-15 and for FY 2015-16 and submit the justification to the Commission within 45 days of the date of Order on the above discrepancies failing which action may be initiated against them individually by the Commission under Section 142 of the Electricity Act, 2003 and also against the Directors of the Petitioner Company.

The Commission further directs UPCL to submit the findings of the study being carried out on sales, average load factor, average billing rate for FY 2015-16 within six months from the date of this Order along with the detailed action plan to rectify such errors."

The Commission again in its Order dated March 21, 2018 while analysing the ABR of various consumer categories observed that the ABR of PTW consumer category was Rs. 1.41/kWh which was substantially lower than the approved Energy charge of Rs. 1.55/kWh. The Commission in the above Order directed the Petitioner as follows:

"However, the Petitioner is directed to instruct its field officers to carry out the corresponding corections in sales also in cases where billing is withdrawn. In future if such instances comes to the knowledge of the Commission, punitive action under Section 142 of the Electricity Act, 2003 may be taken against the errant officers of UPCL."

The Commission in its MYT Order dated February 27, 2019 while analysing the commerical diary for FY 2017-18 observed that ABR for almost all the categories for some divisions were abnormally low as compared to the ABR approved by the Commission. The Commission in the said Order held as follows:

"The Commission has taken serious note of the same and the Petitioner's continued non-compliance of the repeated directions of the Commission to rectify such data distortion. The Commission is of the view that enough opportunity and time has been provided to the Petitioner to rectify the same and, therefore, the Commission in this tariff order has re-casted category wise sales of those divisions that have abnormally low ABR."

The Commission in the current proceedings also sought the commercial diary for FY 2018-19 to check division wise sales and revenue data. The Petitioner in its reply submitted the same. The Commission while analysing the same found that the ABR of almost all the categories for some of the divisions were abnormally low as compared to the ABR approved by the Commission including the additional energy charges approved for recovery of Fuel Charge Adjustment (FCA) allowed by the Commission in FY 2018-19. The Commission also observed huge variations in the consumer data such as nos. of consumers and connected load submitted for March 2019 vis-a-vis February 2019 and those submitted in the Commercial Diary for April 2019.

The Commission during the Technical Validation Session held on January 27, 2020 and subsequently through MOM of TVS dated January 28, 2020 listed out some of the anomalies and sought justifcation with regard to the data submitted in the Commercial Diary. The Petitioner in response to the Commission's observation vide its reply dated February 05, 2020 accepted errors in the Commercial Diaries and submitted that the concerned Officers have been directed to rectify the errors in the Commercial Diaries. The Commission in response to the reply recieved vide its Letter dated February 20, 2020 directed the Petitioner to submit the necessary rectification carried out in the Commercial Diary for FY 2018-19. The Petitioner in response vide its reply dated 05.03.2020 submitted that the necessary rectification was carried out in the month of November, 2019 and also submitted the details of the same.

In view of the above discrepancies observed in the sales data included in the commercial diary submitted by the Petitioner, the Commission in this Tariff Order has re-casted category wise sales of those categories that have abnormally low ABR. The approach adopted for re-casting the category wise sales of UPCL for FY 2018-19 is discussed hereunder:

a) Domestic Consumers

Based on the detailed analysis of the division wise sales and ABR submitted by the Petitioner for FY 2018-19, it is observed that the following divisions have abnormally low ABR.

Table 3.2: UPCL Divisions with Lower ABR for Domestic Category

S.No.	Name of Division/Circles	No. of Consumers	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR Actual (Rs./kWh)
Domestic (Except RTS 1.1)						
1.	EDD, Srinagar	33969	41667	26.74	970.37	3.63
2.	EDD, Pauri	37511	44746	18.42	747.50	4.06
3.	EDD, Narayanbagarh	10649	11117	5.09	195.09	3.84
4.	EDD, Gairsain	16872	17239	10.41	378.89	3.64
5.	EDD, Gopeshwar	25291	28281	19.75	710.51	3.60
6.	EDD, Kotdwar	74170	98632	69.47	2,587.66	3.72
7.	EDD, Rudraprayag	34916	35873	21.64	700.28	3.24
8.	EDD, Nainital	42842	61660	31.49	984.53	3.13
9.	EDD, Jaspur	33167	46575	57.39	1,736.52	3.03
10.	EDD, Bageshwar	38292	42924	21.24	768.71	3.62
11.	EDD, Ranikhet	30213	32011	16.91	636.84	3.77
12.	EDD, Bhikiyasain	24264	29970	8.98	428.35	4.77
13.	EDD, Dharchula	19170	19326	13.83	486.94	3.52
RTS 1.1 (BPL/Lifeline)						
1.	EDD, Raipur	3217	3217	3.21	80.21	2.50
2.	EDD Vikasnagar	22714	22714	18.79	546.78	2.91
3.	EDD, Doiwala	4108	4215	4.07	130.33	3.21
4.	EDD (N), Dehradun	612	612	0.85	28.38	3.34
5.	EDD (S), Dehradun	173	173	0.23	7.83	3.38
6.	EDD (R), Roorkee	7313	7355	8.68	270.47	3.12
7.	EDD Bhagwanpur	12116	12266	11.96	400.00	3.35
8.	EDD Ramnagar	1947	1963	2.44	81.59	3.35
9.	EDD (U), Hardwar	1942	1942	1.46	45.75	3.13
10.	EDD, Laksar	3420	3420	4.27	134.37	3.15
11.	EDD (U), Haldwani	1108	1108	0.84	27.05	3.20
12.	EDD, Nainital	15094	15094	4.02	94.70	2.36
13.	EDD, Ramnagar	5958	5958	0.39	10.79	2.79
14.	EDD, Kashipur	1022	1022	2.16	57.60	2.66
15.	EDD, Jaspur	2775	2775	3.42	93.42	2.73
16.	EDD, Rudrapur	8080	8080	8.53	176.17	2.07
17.	EDD, Sitarganj	14289	14289	12.58	352.31	2.80
18.	EDD, Champawat	20228	20228	8.91	160.47	1.80
19.	EDD, Dharchula	11655	11655	6.37	127.96	2.01

The Commission in its previous Tariff Orders has been recasting the assessed sales based on the load factor of metered consumers. However, as discussed above, for FY 2018-19 division wise re-casting has been done where the actual ABR is found to be considerably lower than the approved tariffs. In order to assess normative ABR on the basis of Rate Schedule approved by the Commission, the Commission has computed the same for Domestic Consumers including RTS 1.1 (BPL/Lifeline Consumers) considering the energy charges (including additional energy charges approved for recovery of FCA charge) and fixed charges applicable for the consumers considering the consumption per kW per month for domestic consumers except BPL consumers. However, for BPL/Lifeline consumers, the Commission has considered the consumption per consumer per month against consumption per kW per month, in deviation to its approach followed in previous years as in certain divisions BPL/Lifeline consumers had load exceeding 1 kW. UPCL was asked to clarify the same to which it replied that the same was in accordance with UERC (Supply Code) Regulations, 2007. However, tariff of BPL/lifeline consumers is applicable to the consumers having load upto 1 kW and consumption upto 60 units/month. Based on the normative ABR and revenue booked, excess sales to be disallowed has been computed for each division. The excess sale to be disallowed for the above Divisions is as shown below:

Table 3.3: Excess Sales to be disallowed for Domestic Category (Except RTS 1.1)

S. No	Name of Division/Circles	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)	Consumption /kW/ month	ABR (Normative) Rs./kWh	Excess Sales (MU)
1.	EDD, Srinagar	41667	26.74	970.37	3.63	53.48	3.73	0.73
2.	EDD, Pauri	44746	18.42	747.50	4.06	34.31	4.31	1.06
3.	EDD, Narayanbagarh	11117	5.09	195.09	3.84	38.13	4.14	0.38
4.	EDD, Gairsain	17239	10.41	378.89	3.64	50.32	3.80	0.43
5.	EDD, Gopeshwar	28281	19.75	710.51	3.60	58.21	3.65	0.27
6.	EDD, Kotdwar	98632	69.47	2,587.66	3.72	58.70	3.64	0.00
7.	EDD, Rudraprayag	35873	21.64	700.28	3.24	50.27	3.80	3.19
8.	EDD, Nainital	61660	31.49	984.53	3.13	42.56	3.99	6.85
9.	EDD, Jaspur	46575	57.39	1,736.52	3.03	102.68	3.50	7.81
10.	EDD, Bageshwar	42924	21.24	768.71	3.62	41.23	4.04	2.19
11.	EDD, Ranikhet	32011	16.91	636.84	3.77	44.02	3.95	0.80
12.	EDD, Bhikiyasain	29970	8.98	428.35	4.77	24.97	4.90	0.25
13.	EDD, Dharchula	19326	13.83	486.94	3.52	59.64	3.62	0.40
Total								**24.36**

Table 3.4: Excess Sales to be disallowed for Domestic Category (RTS1.1 – BPL/Lifeline)

S. No	Name of Division/Circles	Consumer	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)	Consumption /Con./month	ABR (Normative) Rs./kWh	Excess Sales (MU)
1.	EDD, Raipur	3217	3.21	80.21	2.50	83.15	3.34	0.81
2.	EDD Vikasnagar	22714	18.79	546.78	2.91	68.94	3.48	3.06
3.	EDD, Doiwala	4108	4.07	130.33	3.21	82.48	3.34	0.17
4.	EDD (N), Dehradun	612	0.85	28.38	3.34	115.60	3.48	0.03
5.	EDD (S), Dehradun	173	0.23	7.83	3.38	111.75	3.48	0.01
6.	EDD (R), Roorkee	7313	8.68	270.47	3.12	98.93	3.23	0.32
7.	EDD Bhagwanpur	12116	11.96	400.00	3.35	82.24	3.35	0.00
8.	EDD Ramnagar	1947	2.44	81.59	3.35	104.39	3.48	0.09
9.	EDD (U), Hardwar	1942	1.46	45.75	3.13	62.78	3.55	0.18
10.	EDD, Laksar	3420	4.27	134.37	3.15	104.06	3.48	0.41
11.	EDD (U), Haldwani	1108	0.84	27.05	3.20	63.48	3.54	0.08
12.	EDD, Nainital	15094	4.02	94.70	2.36	22.19	2.45	0.15
13.	EDD, Ramnagar	5958	0.39	10.79	2.79	5.41	4.96	0.17
14.	EDD, Kashipur	1022	2.16	57.60	2.66	176.29	3.48	0.51
15.	EDD, Jaspur	2775	3.42	93.42	2.73	102.61	3.48	0.73
16.	EDD, Rudrapur	8080	8.53	176.17	2.07	87.98	3.30	3.20
17.	EDD, Sitarganj	14289	12.58	352.31	2.80	73.37	3.43	2.30
18.	EDD, Champawat	20228	8.91	160.47	1.80	36.69	2.13	1.37
19.	EDD, Dharchula	11655	6.37	127.96	2.01	45.51	2.03	0.07
Total								**13.64**

Accordingly, based on the above, the total re-casted sales for Domestic Category for FY 2018-19 works out to 2811.20 MU against 2849.20 MU submitted by UPCL.

b) Non-Domestic:

Based on the detailed analysis of the division wise sales and ABR submitted for FY 2018-19, it is observed that the ABR for the category for some of the Divisions was considerably lower than the average ABR of the category for the State as a whole. On excluding the sales and revenues of the divisions having considerable low ABR, the average ABR for the category works out to Rs. 5.92/kWh for contracted capacity upto 75 kW and Rs. 5.79/kWh for contracted capacity above 75 kW. The Commission has re-casted the sales of following divisions for which the ABR has been found to be considerably lower than Rs. 5.92/kWh (upto 75 kW) and lower than Rs. 5.79/kWh (above 75 kW).

Table 3.5: UPCL Divisions with Lower ABR for Non-Domestic Category

S. No.	Name of Division/Circles	No. of Consumers	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)
RTS:2 - Non-Domestic (Upto 75 kW)						
1.	EDD Vikasnagar	7366	21554	18.83	1,012.40	5.38
2.	EDD, Rishikesh	10650	27591	31.55	1,726.50	5.47
3.	EDD, Gairsain	1946	4271	4.64	252.72	5.45
4.	EDD, Rudraprayag	4133	11364	9.41	506.44	5.38
5.	EDD, Ranikhet	2895	8701	8.33	473.30	5.68
6.	EDD, Sitarganj	4032	12599	14.79	826.26	5.59
7.	EDD, Khatima	3277	10670	9.34	514.03	5.50
8.	EDD, Pithoragarh	5079	8755	11.53	636.66	5.52
9.	EDD, Champawat	3991	10697	10.34	553.54	5.35
10.	EDD, Dharchula	1840	3967	6.47	354.00	5.47
RTS:2 - Non-Domestic (Above 75 kW)						
1.	EDD, Rishikesh	31	10636	23.13	1,225.66	5.30
2.	EDD, Doiwala	9	5173	13.06	631.49	4.83
3.	EDD, Pauri	5	1965	2.91	141.67	4.87
4.	EDD, Rudraprayag	4	1250	2.27	123.87	5.46
5.	EDD Bhagwanpur	7	1943	2.54	138.98	5.47
6.	EDD (U), Haldwani	40	8588	14.62	795.97	5.44
7.	EDD, Bageshwar	2	300	0.52	27.80	5.39

Based on the normative ABR as discussed above and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

Table 3.6: Excess Sales to be disallowed for Non-Domestic Category

S. No.	Name of Division/Circles	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)	ABR (Normativ) Rs./kWh	Excess Sales (MU)
RTS:2 - Non-Domestic (Upto 75 kW)							
1.	EDD Vikasnagar	21554	18.83	1,012.40	5.38	5.92	1.73
2.	EDD, Rishikesh	27591	31.55	1,726.50	5.47	5.92	2.39
3.	EDD, Gairsain	4271	4.64	252.72	5.45	5.92	0.37
4.	EDD, Rudraprayag	11364	9.41	506.44	5.38	5.92	0.86
5.	EDD, Ranikhet	8701	8.33	473.30	5.68	5.92	0.34
6.	EDD, Sitarganj	12599	14.79	826.26	5.59	5.92	0.84
7.	EDD, Khatima	10670	9.34	514.03	5.50	5.92	0.66
8.	EDD, Pithoragarh	8755	11.53	636.66	5.52	5.92	0.78
9.	EDD, Champawat	10697	10.34	553.54	5.35	5.92	0.99
10.	EDD, Dharchula	3967	6.47	354.00	5.47	5.92	0.49
RTS:2 - Non-Domestic (Above 75 kW)							
1.	EDD, Rishikesh	10636	23.13	1,225.66	5.30	5.79	1.96
2.	EDD, Doiwala	5173	13.06	631.49	4.83	5.79	2.16
3.	EDD, Pauri	1965	2.91	141.67	4.87	5.79	0.46
4.	EDD, Rudraprayag	1250	2.27	123.87	5.46	5.79	0.13
5.	EDD Bhagwanpur	1943	2.54	138.98	5.47	5.79	0.14
6.	EDD (U), Haldwani	8588	14.62	795.97	5.44	5.79	0.87
7.	EDD, Bageshwar	300	0.52	27.80	5.39	5.79	0.04
Total							**15.19**

Accordingly, based on the above, the total re-casted sales for Non-Domestic Category for FY 2018-19 works out to 1286.15 MU as against 1301.34 MU submitted by UPCL.

c) Public Lamp:

Similarly, for public lamps, normative ABR has been computed for each division considering the energy charges, additional energy charges allowed to recover FCA and fixed charges approved by the Commission and the same has been compared with the average division wise ABR and wherever the actual division wise ABR is found to be lower than the normative ABR, sales has been re-estimated based on the actual revenue and normative ABR. The excess sales worked out following the above approach is 1.43 MU.

Accordingly, based on the above, the total re-casted sales for Public Lamp Category for FY 2018-19 works out to 47.74 MU as against 49.16 MU submitted by UPCL.

d) PTW Category:

Based on the detailed analysis of the division wise sales and ABR submitted for FY 2018-19, it is observed that the ABR for the category was lower than the energy charge of Rs. 1.865/kWh including additional energy charge allowed to recover FCA of Rs. 0.025/kWh approved by the Commission for almost all the divisions.

Table 3.7: UPCL Divisions with Lower ABR for RTS 4 Category

S. No.	Name of Division/Circles	No. of Consumers	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)
RTS 4 – Private Tube Well						
1.	EDD Vikasnagar	408	4153	2.05	37.84	1.85
2.	EDD, Rishikesh	181	731	0.68	12.45	1.84
3.	EDD, Doiwala	88	854	0.25	4.66	1.84
4.	EDD, Mohanpur	206	1447	2.03	37.42	1.84
5.	EDD (U), Roorkee	1986	12020	17.07	314.37	1.84
6.	EDD (R), Roorkee	3896	23370	21.13	389.31	1.84
7.	EDD Bhagwanpur	4086	22459	37.67	692.87	1.84
8.	EDD Ramnagar (Roorkee)	960	5023	5.06	93.05	1.84
9.	EDD (U), Hardwar	177	861	0.74	13.65	1.84
10.	EDD, Laksar	3817	16488	13.41	246.56	1.84
11.	EDD, Jwalapur	790	3984	3.27	60.28	1.84
12.	EDD, Ramnagar	729	2971	3.24	59.97	1.85
13.	EDD, Bajpur	3016	20889	16.69	304.64	1.83
14.	EDD, Jaspur	2596	10951	11.22	206.96	1.84
15.	EDD, Rudrapur	5150	26484	18.83	350.15	1.86
16.	EDD, Sitarganj	2685	11215	7.76	140.14	1.81
17.	EDD, Khatima	1264	5416	6.70	121.42	1.81

The re-casting is done division wise where actual ABR is found to be considerably lower. Based on the normative ABR equivalent to tariff for this category and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

Table 3.8: Excess Sales to be disallowed for PTW Category

S.No.	Name of Division/Circles	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR Actual (Rs./kWh)	ABR (Normative) (Rs./kWh)	Excess Sales (MU)
1.	EDD Vikasnagar	4153	2.05	37.84	1.85	1.865	0.02
2.	EDD, Rishikesh	731	0.68	12.45	1.84	1.865	0.01
3.	EDD, Doiwala	854	0.25	4.66	1.84	1.865	0.00
4.	EDD, Mohanpur	1447	2.03	37.42	1.84	1.865	0.03
5.	EDD (U), Roorkee	12020	17.07	314.37	1.84	1.865	0.21
6.	EDD (R), Roorkee	23370	21.13	389.31	1.84	1.865	0.26
7.	EDD Bhagwanpur	22459	37.67	692.87	1.84	1.865	0.51
8.	EDD Ramnagar (Roorkee)	5023	5.06	93.05	1.84	1.865	0.07
9.	EDD (U), Hardwar	861	0.74	13.65	1.84	1.865	0.01
10.	EDD, Laksar	16488	13.41	246.56	1.84	1.865	0.19
11.	EDD, Jwalapur	3984	3.27	60.28	1.84	1.865	0.04
12.	EDD, Ramnagar	2971	3.24	59.97	1.85	1.865	0.02
13.	EDD, Bajpur	20889	16.69	304.64	1.83	1.865	0.36
14.	EDD, Jaspur	10951	11.22	206.96	1.84	1.865	0.12
15.	EDD, Rudrapur	26484	18.83	350.15	1.86	1.865	0.05
16.	EDD, Sitarganj	11215	7.76	140.14	1.81	1.865	0.25
17.	EDD, Khatima	5416	6.70	121.42	1.81	1.865	0.18
Total							**2.35**

Accordingly, based on the above, the total re-casted sales for PTW Category for FY 2018-19 works out to 187.79 MU as against 190.13 MU submitted by UPCL.

e) Government Irrigation System

Based on the detailed analysis of the division wise sales and ABR submitted by the Petitioner for FY 2018-19, it is observed that following divisions have abnormally low ABR.

Table 3.9: UPCL Divisions with Lower ABR for Government Irrigation System

S. No.	Name of Division/Circles	No. of Consumers	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR Actual (Rs./kWh)
RTS-3: Government Public Utilities - GIS (Lift Irrigation Schemes)						
1.	EDD, Rishikesh	1	211	0.34	18.58	5.40
2.	EDD, Doiwala	4	342	1.20	62.06	5.19
3.	EDD, Rudraprayag	15	1942	0.23	22.81	9.83
4.	EDD, Nainital	8	1160	0.44	23.33	5.35
5.	EDD, Pithoragarh	12	480	0.15	9.29	6.23
6.	EDD, Champawat	1	200	0.13	6.72	5.01
7.	EDD, Dharchula	12	520	0.37	19.87	5.44
RTS-3: Government Public Utilities - GIS (Other than Lift Irrigation Schemes)						
1.	EDD, Raipur	8	304	0.90	44.56	4.93
2.	EDD, Doiwala	33	1810	6.71	338.55	5.05
3.	EDD, Mohanpur	64	2870	7.37	387.37	5.26
4.	EDD (S), Dehradun	5	166	0.84	42.96	5.11
5.	EDD, Uttarkashi	41	4025	1.36	93.52	6.90
6.	EDD, Srinagar	5	330	0.09	6.17	6.71
7.	EDD, Gairsain	5	227	0.13	6.85	5.96
8.	EDD, Kotdwar	59	3705	8.36	429.51	5.14
9.	EDD (U), Roorkee	118	2683	5.03	255.14	5.07
10.	EDD (R), Roorkee	62	999	2.83	149.50	5.28
11.	EDD Bhagwanpur	128	2429	4.59	238.96	5.21
12.	EDD Ramnagar (Roorkee)	25	362	1.14	60.19	5.27
13.	EDD (U), Hardwar	22	719	1.45	77.46	5.35
14.	EDD, Laksar	159	2105	3.13	161.47	5.16
15.	EDD, Jwalapur	24	230	0.53	27.94	5.23
16.	EDD, Nainital	24	1431	1.51	79.42	5.27
17.	EDD, Ramnagar	186	9752	15.48	846.93	5.47
18.	EDD (R), Haldwani	132	8572	30.40	1551.85	5.11
19.	EDD, Kashipur	54	750	2.06	108.51	5.27
20.	EDD, Almora	27	613	0.27	15.45	5.76
21.	EDD, Ranikhet	9	372	0.10	5.68	5.80
22.	EDD, Bhikiyasain	33	1158	2.28	119.48	5.23
23.	EDD, Rudrapur	60	746	6.64	334.81	5.04
24.	EDD, Sitarganj	84	1667	3.16	163.04	5.17
25.	EDD, Champawat	36	750	1.64	82.04	5.01

In order to assess normative ABR on the basis of Rate Schedule approved by the Commission, the Commission has computed the same considering the energy charges (including additional energy charge of Rs. 0.066/kWh allowed to recover FCA) and fixed charges applicable for the consumers considering the consumption per kW per month for the respective division. Based on the normative ABR and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

Table 3.10: Excess Sales to be disallowed for GIS Category

S. No.	Name of Division/Circles	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)	Consumption /kW/month	ABR (Normative) Rs./kWh	Excess Sales (MU)
RTS-3: Government Public Utilities - GIS (Lift Irrigation Schemes)								
1.	EDD, Rishikesh	211	0.34	18.58	5.40	135.86	5.54	0.01
2.	EDD, Doiwala	342	1.20	62.06	5.19	291.18	5.35	0.03
3.	EDD, Rudraprayag	1942	0.23	22.81	9.83	9.96	10.20	0.01
4.	EDD, Nainital	1160	0.44	23.33	5.35	31.32	6.77	0.09
5.	EDD, Pithoragarh	480	0.15	9.29	6.23	25.87	7.11	0.02
6.	EDD, Champawat	200	0.13	6.72	5.01	55.83	6.07	0.02
7.	EDD, Dharchula	520	0.37	19.87	5.44	58.49	6.03	0.04
RTS-3: Government Public Utilities - GIS (Other than Lift Irrigation Schemes)								
1.	EDD, Raipur	304	0.90	44.56	4.93	247.53	5.38	0.07
2.	EDD, Doiwala	1810	6.71	338.55	5.05	308.89	5.34	0.36
3.	EDD, Mohanpur	2870	7.37	387.37	5.26	213.97	5.41	0.21
4.	EDD (S), Dehradun	166	0.84	42.96	5.11	421.69	5.29	0.03
5.	EDD, Uttarkashi	4025	1.36	93.52	6.90	28.07	6.96	0.01
6.	EDD, Srinagar	330	0.09	6.17	6.71	23.23	7.33	0.01
7.	EDD, Gairsain	227	0.13	6.85	5.96	42.22	6.36	0.01
8.	EDD, Kotdwar	3705	8.36	429.51	5.14	188.01	5.44	0.46
9.	EDD (U), Roorkee	2683	5.03	255.14	5.07	156.20	5.49	0.39
10.	EDD (R), Roorkee	999	2.83	149.50	5.28	236.07	5.39	0.05
11.	EDD Bhagwanpur	2429	4.59	238.96	5.21	157.33	5.49	0.24
12.	EDD Ramnagar (Roorkee)	362	1.14	60.19	5.27	262.89	5.36	0.02
13.	EDD (U), Hardwar	719	1.45	77.46	5.35	167.71	5.47	0.03
14.	EDD, Laksar	2105	3.13	161.47	5.16	123.99	5.58	0.24
15.	EDD, Jwalapur	230	0.53	27.94	5.23	193.64	5.43	0.02
16.	EDD, Nainital	1431	1.51	79.42	5.27	87.76	5.74	0.12
17.	EDD, Ramnagar	9752	15.48	846.93	5.47	132.24	5.55	0.22
18.	EDD (R), Haldwani	8572	30.40	1551.85	5.11	295.52	5.34	1.36
19.	EDD, Kashipur	750	2.06	108.51	5.27	228.89	5.39	0.05
20.	EDD, Almora	613	0.27	15.45	5.76	36.43	6.55	0.03
21.	EDD, Ranikhet	372	0.10	5.68	5.80	21.95	7.45	0.02
22.	EDD, Bhikiyasain	1158	2.28	119.48	5.23	164.29	5.48	0.10
23.	EDD, Rudrapur	746	6.64	334.81	5.04	741.62	5.24	0.25
24.	EDD, Sitarganj	1667	3.16	163.04	5.17	157.72	5.49	0.19
25.	EDD, Champawat	750	1.64	82.04	5.01	182.00	5.45	0.13
Total								**4.86**

Accordingly, based on the above, the total re-casted sales for GIS for FY 2018-19 works out to 149.56 MU as against 154.42 MU submitted by UPCL.

f) Public Water Works

Based on the detailed analysis of the division wise sales and ABR submitted by the Petitioner for FY 2018-19, it is observed that the following divisions have abnormally low ABR.

Table 3.11: UPCL Divisions with Lower ABR for Public Water Works

S. No.	Name of Division/Circles	No. of Consumers	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)
RTS – 3: Government Public Utilities - Public Water Works (Funtioning under other local bodies)						
1.	EDD, Rishikesh	10	551	1.18	61.23	5.21
2.	EDD, Doiwala	8	138	0.41	21.72	5.30
3.	EDD, Mohanpur	10	304	0.60	31.75	5.27
4.	EDD (S), Dehradun	9	327	1.44	71.92	4.98
5.	EDD, Srinagar	5	110	0.05	3.03	5.61
6.	EDD, Pauri	2	703	1.78	93.31	5.25
7.	EDD, Gopeshwar	57	74	0.45	23.09	5.17
8.	EDD Bhagwanpur	7	96	0.17	9.08	5.30
9.	EDD, Laksar	22	226	0.26	13.22	5.17
10.	EDD, Jwalapur	7	1360	6.63	337.71	5.09
11.	EDD, Nainital	116	8379	27.65	1455.46	5.26
12.	EDD, Ramnagar	35	1323	6.04	319.16	5.28
13.	EDD, Bajpur	18	257	0.60	32.14	5.34
14.	EDD, Almora	30	3611	17.39	894.65	5.15
15.	EDD, Bageshwar	11	933	2.89	152.20	5.26
16.	EDD, Ranikhet	37	3097	10.89	566.71	5.20
17.	EDD, Rudrapur	39	992	2.43	122.18	5.04
18.	EDD, Sitarganj	24	302	0.92	46.63	5.07
19.	EDD, Khatima	20	267	0.82	43.11	5.28
20.	EDD, Champawat	21	323	1.71	85.52	5.01
RTS – 3: Government Public Utilities - Public Water Works (Other than Funtioning under other local bodies)						
1.	EDD, Raipur	108	4892	25.50	1,269.94	4.98
2.	EDD, Rishikesh	39	942	7.63	383.34	5.02
3.	EDD, Doiwala	38	1353	8.37	415.00	4.96
4.	EDD, Mohanpur	17	448	1.75	89.54	5.13
5.	EDD (S), Dehradun	141	5974	26.65	1,260.37	4.73
6.	EDD (C), Dehradun	84	4668	32.60	1,581.17	4.85
7.	EDD, Tehri	28	8977	33.81	1,745.60	5.16
8.	EDD, Uttarkashi	9	566	1.01	55.28	5.48
9.	EDD, Srinagar	38	7677	26.53	1,364.77	5.14
10.	EDD, Kotdwar	91	3428	14.19	741.57	5.23
11.	EDD, Rudraprayag	2	561	0.87	40.43	4.63
12.	EDD (R), Roorkee	12	333	0.98	51.54	5.28
13.	EDD Bhagwanpur	2	46	0.42	21.71	5.15
14.	EDD Ramnagar (Roorkee)	10	421	1.65	83.98	5.10
15.	EDD (U), Hardwar	85	3209	14.64	759.61	5.19
16.	EDD (R), Hardwar	2	50	0.44	22.61	5.09
17.	EDD, Laksar	5	117	0.37	19.28	5.16
18.	EDD, Jwalapur	60	4330	7.48	380.77	5.09
19.	EDD, Nainital	4	259	0.40	21.44	5.33

In order to assess normative ABR on the basis of Rate Schedule approved by the Commission, the Commission has computed the same considering the energy charges (including additional energy charge of Rs. 0.066/kWh allowed to recover FCA) and fixed charges applicable for the consumers considering the consumption per kW per month for the respective division.

Based on the normative ABR and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

Table 3.12: Excess Sales to be disallowed for Public Water Works Category

S. No.	Name of Division/Circles	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)	Consumption /kW/Month	ABR (Normative) Rs./kWh	Excess Sales (MU)
RTS – 3: Government Public Utilities - Public Water Works (Funtioning under other local bodies)								
1.	EDD, Rishikesh	551	1.18	61.23	5.21	177.71	5.46	0.05
2.	EDD, Doiwala	138	0.41	21.72	5.30	247.58	5.38	0.01
3.	EDD, Mohanpur	304	0.60	31.75	5.27	165.02	5.48	0.02
4.	EDD (S), Dehradun	327	1.44	71.92	4.98	367.99	5.31	0.09
5.	EDD, Srinagar	110	0.05	3.03	5.61	40.91	6.40	0.01
6.	EDD, Pauri	703	1.78	93.31	5.25	210.64	5.41	0.05
7.	EDD, Gopeshwar	74	0.45	23.09	5.17	503.38	5.27	0.01
8.	EDD Bhagwanpur	96	0.17	9.08	5.30	148.70	5.51	0.01
9.	EDD, Laksar	226	0.26	13.22	5.17	94.33	5.70	0.02
10.	EDD, Jwalapur	1360	6.63	337.71	5.09	406.40	5.30	0.26
11.	EDD, Nainital	8379	27.65	1455.46	5.26	274.97	5.36	0.48
12.	EDD, Ramnagar	1323	6.04	319.16	5.28	380.45	5.31	0.03
13.	EDD, Bajpur	257	0.60	32.14	5.34	195.20	5.43	0.01
14.	EDD, Almora	3611	17.39	894.65	5.15	401.20	5.30	0.50
15.	EDD, Bageshwar	933	2.89	152.20	5.26	258.49	5.37	0.06
16.	EDD, Ranikhet	3097	10.89	566.71	5.20	293.00	5.35	0.29
17.	EDD, Rudrapur	992	2.43	122.18	5.04	203.71	5.42	0.17
18.	EDD, Sitarganj	302	0.92	46.63	5.07	253.86	5.37	0.05
19.	EDD, Khatima	267	0.82	43.11	5.28	254.99	5.37	0.01
20.	EDD, Champawat	323	1.71	85.52	5.01	440.14	5.29	0.09
RTS – 3: Government Public Utilities - Public Water Works (Other than Functioning under other local bodies)								
1.	EDD, Raipur	4892	25.50	1,269.94	4.98	434.40	5.29	1.49
2.	EDD, Rishikesh	942	7.63	383.34	5.02	675.16	5.25	0.33
3.	EDD, Doiwala	1353	8.37	415.00	4.96	515.34	5.27	0.49
4.	EDD, Mohanpur	448	1.75	89.54	5.13	324.59	5.33	0.06
5.	EDD (S), Dehradun	5974	26.65	1,260.37	4.73	371.75	5.31	2.91
6.	EDD(C), Dehradun	4668	32.60	1,581.17	4.85	582.01	5.26	2.55
7.	EDD, Tehri	8977	33.81	1,745.60	5.16	313.87	5.33	1.09
8.	EDD, Uttarkashi	566	1.01	55.28	5.48	148.41	5.51	0.01
9.	EDD, Srinagar	7677	26.53	1,364.77	5.14	287.99	5.35	1.01
10.	EDD, Kotdwar	3428	14.19	741.57	5.23	344.88	5.32	0.25
11.	EDD, Rudraprayag	561	0.87	40.43	4.63	129.68	5.56	0.15
12.	EDD (R), Roorkee	333	0.98	51.54	5.28	244.49	5.38	0.02
13.	EDD Bhagwanpur	46	0.42	21.71	5.15	763.59	5.24	0.01
14.	EDD Ramnagar (Roorkee)	421	1.65	83.98	5.10	325.75	5.33	0.07
15.	EDD (U), Hardwar	3209	14.64	759.61	5.19	380.08	5.31	0.32
16.	EDD (R), Hardwar	50	0.44	22.61	5.09	740.00	5.24	0.01
17.	EDD, Laksar	117	0.37	19.28	5.16	266.22	5.36	0.01
18.	EDD, Jwalapur	4330	7.48	380.77	5.09	143.98	5.52	0.59
19.	EDD, Nainital	259	0.40	21.44	5.33	129.34	5.56	0.02
Total								**13.61**

Accordingly, based on the above, the total re-casted sales for PWW for FY 2018-19 work out to 397.47 MU as against 411.07 MU submitted by UPCL.

g) LT Industry

Based on the detailed analysis of the division wise sales submitted for FY 2018-19, it is observed that the ABR for the category was abnormally lower in case of the following divisions:

Table 3.13: UPCL Divisions with Lower ABR for LT Industry

S. No.	Name of Division/Circles	No. of Consumers	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)
1.	EDD, Nainital	62	908	1.30	69.71	5.35
2.	EDD, Kashipur	396	9630	19.40	874.90	4.51
3.	EDD, Jaspur	418	12447	16.35	859.87	5.26
4.	EDD, Almora	109	895	0.55	33.17	6.04
5.	EDD, Bageshwar	167	1479	0.92	60.97	6.66
6.	EDD, Rudrapur	1158	38957	70.60	3521.07	4.99
7.	EDD, Khatima	455	7260	6.61	360.55	5.46

The division wise normative ABR has been worked out considering the energy charge (including the additional energy charges of Rs. 0.066/kWh allowed to recover FCA) and fixed charges applicable for the consumer category considering the consumption per kW per month. Based on the normative ABR and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

Table 3.14: Excess Sales to be disallowed for LT Industry

S. No.	Name of Division/Circles	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)	Consumption /kW/Month	ABR (Normative) Rs./kWh	Excess Sales (MU)
1.	EDD, Nainital	908	1.30	69.71	5.35	119.59	5.53	0.04
2.	EDD, Kashipur	9630	19.40	874.90	4.51	167.90	5.18	2.51
3.	EDD, Jaspur	12447	16.35	859.87	5.26	109.46	5.64	1.11
4.	EDD, Almora	895	0.55	33.17	6.04	51.12	7.15	0.09
5.	EDD, Bageshwar	1479	0.92	60.97	6.66	51.56	7.13	0.06
6.	EDD, Rudrapur	38957	70.60	3521.07	4.99	151.02	5.28	3.86
7.	EDD, Khatima	7260	6.61	360.55	5.46	75.84	6.23	0.82
Total								**8.49**

Accordingly, based on the above, the total re-casted sales for LT Industry for FY 2018-19 works out to 301.44 MU as against 309.93 MU submitted by UPCL.

h) HT Industry

The Petitioner submitted the sales to HT Industry of 6355.76 MU for FY 2018-19. The Commission in this regard sought clarification from UPCL whether the sales made to HT Industrial category has been adjusted for power consumed by HT Industrial consumers through open access. The Petitioner in its reply submitted that the energy availed through open access enrgy by HT

Industrial consumers has been adjusted from the consumption units recorded in respect of HT Industries.

The Commission further carried out detailed analysis of the division wise sales and ABR submitted by the Petitioner for FY 2018-19, and from the same it is observed that following divisions have abnormally low ABR.

Table 3.15: UPCL Divisions with Lower ABR for HT Industries

S. No.	Name of Division/Circles	No. of Consumers	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR Actual (Rs./kWh)
HT Industry (Upto 1000 kVA)						
1.	EDD, Nainital	6	1877	3.09	172.99	5.59
2.	EDD, Kashipur	109	40299	83.27	4517.49	5.42
3.	EDD, Bajpur	56	24361	39.23	2089.68	5.33
4.	EDD, Jaspur	46	14973	35.59	1862.60	5.23
5.	EDD, Rudrapur	359	144213	347.18	17604.66	5.07
6.	EDD, Sitarganj	104	31843	69.60	3673.02	5.28
HT Industry (Above 1000 kVA)						
1.	EDD, Rudrapur	70	196987	847.67	43215.09	5.10
2.	EDD, Sitarganj	16	53600	225.95	11327.70	5.01

In order to assess normative ABR on the basis of the Rate Schedule approved by the Commission, the Commission has computed the same considering the energy charges (including additional energy charge of Rs. 0.066/kVAh allowed to recover FCA) and fixed charges applicable for the consumer category considering the consumption per kW per month for the respective divisions. Based on the normative ABR and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

Table 3.16: Excess Sales to be disallowed for HT industry

S. No.	Name of Division/Circles	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)	Consumption /kW/Month	ABR (Normative) Rs./kWh	Excess Sales (MU)
HT Industry (Upto 1000 kVA)								
1.	EDD, Nainital	1877	3.09	172.99	5.59	137.36	6.09	0.25
2.	EDD, Kashipur	40299	83.27	4517.49	5.42	172.20	5.65	3.26
3.	EDD, Bajpur	24361	39.23	2089.68	5.33	134.21	6.14	5.20
4.	EDD, Jaspur	14973	35.59	1862.60	5.23	198.06	5.42	1.21
5.	EDD, Rudrapur	144213	347.18	17604.66	5.07	200.62	5.40	21.06
6.	EDD, Sitarganj	31843	69.60	3673.02	5.28	182.14	5.55	3.42
HT Industry (Above 1000 kVA)								
1.	EDD, Rudrapur	196987	847.67	43215.09	5.10	358.60	5.15	8.37
2.	EDD, Sitarganj	53600	225.95	11327.70	5.01	351.29	5.17	6.84
Total								**49.75**

Accordingly, based on the above, the total re-casted sales for HT Industry for FY 2018-19 works out to 6306.01 MU as against 6355.76 MU submitted by UPCL.

i) Mixed Load

Based on the detailed analysis of the division wise sales and ABR submitted by the Petitioner for FY 2018-19, it is observed that following divisions have abnormally low ABR.

Table 3.17: UPCL Divisions with Lower ABR for Mixed Load

S. No.	Name of Division/Circles	No of Consumers	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR Actual (Rs./kWh)
1.	EDD, Raipur	4	1272	1.11	64.47	5.79
2.	EDD (N), Dehradun	7	7890	29.11	1466.13	5.04
3.	EDD (S), Dehradun	3	6110	21.97	1100.17	5.01
4.	EDD, Tehri	5	5057	16.03	806.78	5.03
5.	EDD, Gairsain	2	434	0.65	33.55	5.19
6.	EDD (U), Roorkee	4	12172	38.13	1907.08	5.00
7.	EDD (R), Haldwani	2	699	0.95	49.80	5.25
8.	EDD, Ranikhet	4	1895	6.17	314.35	5.09
9.	EDD, Champawat	6	2226	3.13	167.36	5.34
10.	EDD, Dharchula	2	1175	0.99	52.20	5.26

In order to assess normative ABR on the basis of Rate Schedule approved by the Commission, the Commission has computed the same considering the energy charges (including additional energy charge of Rs. 0.065/kVAh allowed for recovery of FCA) and fixed charges applicable for the consumers considering the consumption per kW per month for the respective divisions. Based on the normative ABR and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

Table 3.18: Excess Sales to be disallowed for Mixed Load

S. No.	Name of Division/Circles	Load (KW)	Energy Sold (MU)	Revenue Booked (Rs. Lakh)	ABR actual (Rs./kWh)	Consumption /kW/Month	ABR (Normative) Rs./kWh	Excess Sales (MU)
1.	EDD, Raipur	1272	1.11	64.47	5.79	72.92	5.89	0.02
2.	EDD (N), Dehradun	7890	29.11	1466.13	5.04	307.50	5.11	0.42
3.	EDD (S), Dehradun	6110	21.97	1100.17	5.01	299.65	5.12	0.46
4.	EDD, Tehri	5057	16.03	806.78	5.03	264.07	5.15	0.36
5.	EDD, Gairsain	434	0.65	33.55	5.19	124.04	5.47	0.03
6.	EDD (U), Roorkee	12172	38.13	1907.08	5.00	261.07	5.15	1.12
7.	EDD (R), Haldwani	699	0.95	49.80	5.25	113.14	5.53	0.05
8.	EDD, Ranikhet	1895	6.17	314.35	5.09	271.33	5.14	0.06
9.	EDD, Champawat	2226	3.13	167.36	5.34	117.25	5.50	0.09
10.	EDD, Dharchula	1175	0.99	52.20	5.26	70.35	5.93	0.11
Total								**2.71**

Accordingly, based on the above, the total re-casted sales for Mixed Load for FY 2018-19 works out to 175.04 MU as against 177.75 MU submitted by UPCL.

Based on the above analysis, the category wise sales for FY 2018-19 as recasted by the Commission is as shown in the Table below:

Table 3.19: Category-wise Sales for FY 2018-19 (MU)

Categories	Approved in the Tariff Order dated March 21, 2018	Claimed in the Petition	Approved after Truing Up
Domestic (RTS - 1)	2,950.13	2,849.20	2,811.20
Non-domestic, incl. Commercial (RTS - 2)	1,319.74	1,301.34	1,286.15
Public Lamps (RTS - 3)	52.63	49.16	47.74
Private Tubewell/Pump Sets (RTS - 4)	368.60	190.13	187.79
Government Irrigation System (RTS - 5)	161.23	154.42	149.56
Public Water Works (RTS - 6)	398.41	411.07	397.47
Industrial Consumers (RTS - 7)	6,392.74	6,665.69	6,607.45
Mixed Load (RTS - 8)	186.78	177.75	175.04
Railway Traction (RTS - 9)	23.45	27.91	27.91
Total	**11,853.72**	**11,826.68**	**11,690.30**

3.1.2 *Distribution Losses*

The Petitioner in its Petition has submitted its distribution losses for FY 2018-19 as 14.32%. The Commission for FY 2018-19 had approved the distribution losses of 14.50% based on the loss reduction trajectory approved in the MYT Order for the Control Period from FY 2016-17 to FY 2018-19. However, as per the actual data submitted by the Petitioner and the re-casted sales approved by the Commission, the actual distribution losses for FY 2018-19 works out to 15.31%.

UPCL vide its letter dated 12.03.2020 submitted that despite its continuous efforts, the distribution losses in various divisions in plain areas, i.e. EDD (Urban) Roorkee, EDD (Rural) Roorkee, EDD Ramnagar, EDD Jwalapur, EDD Khatima, Sitarganj, Vikasnagar, Laksar, Bajpur, Haldwani (Urban) could not be brought below 14.50% due to law and order problem as their officers are stopped and manhandled during checking of connections and disconnection of supply, and, hence, requested that losses in such divisions be treated as uncontrollable and distribution losses in other divisions be treated as controllable and sharing of losses and gains be done accordingly.

In this regard, the Petitioner's submission that on account of law and order problems, the losses in certain divisions in plain areas could not be reduced below 14.50% and, hence, the same should be considered as uncontrollable is unacceptable. To handle law and order problems assistance/support from the administration has to be sought rather than admitting that the losses in such areas cannot be controlled. Besides, the Petitioner should realise that the Commission approves the single loss trajectory for the entire license area of UPCL and not different trajectories for different divisions. Hence, this claim of the Petitioner is far fetched and unacceptable.

The Commission, in accordance with the approach adopted in its previous Orders, has allowed the actual quantum of power purchase made by the Petitioner. Considering the actual energy input of 13,803.71 MU at distribution periphery (T&D interface) for FY 2018-19 and applying the approved loss level of 14.50% for the year, the Commission re-estimated the sales of 11,802.18 MU for FY 2018-19. As against this sale of 11,802.18 MU, the actual re-casted sales approved by the Commission for FY 2018-19 is 11,690.30 MU. Therefore, there is a loss of sales to the tune of 111.87 MU on account of commercial inefficiencies of the Petitioner resulting from its failure to achieve distribution losses target approved by the Commission. The Commission has worked out the average billing rate of Rs. 5.06/kWh on the approved re-casted sales of 11,690.30 MU. The Commission has also adjusted the revenue from sale of power of Rs. 5915.24 Crore submitted by UPCL for FY 2018-19, by adding the revenue corresponding to the sales recorded for UPCL, PTCUL and UJVN Ltd. employees at an average ABR of other domestic consumers, since their Average billing rate was much lower than the ABR of other domestic consumers. Accordingly, the adjusted revenue for FY 2018-19 works out to Rs. 5918.11 Crore. Accordingly, the Commission has computed the additional revenue on account of loss in sales due to higher distribution loss of Rs. 56.63 Crore for FY 2018-19. The following Table shows actual distribution loss and approved distribution loss along with efficiency loss for FY 2018-19 as explained above.

Table 3.20: Assessed Distribution Losses for FY 2018-19 (MU)

Particulars	Approved in the Tariff Order dated 21.03.2018	Revised Claim	Approved after Truing Up
Actual Energy Input at T-D Interface / Power Purchase Requirement (MU)	13904.65	13803.71	13803.71
Actual/ Recasted Sales (MU)	11853.72	11826.68	11690.30
Actual Distribution Loss (MU)	2050.93	1977.03	2113.41
Distribution Loss Level (%)	14.75%	14.32%	15.31%
Commercial Loss Reduction (%)	0.25%	0.00%	0.00%
(Loss)/Gain of sales due to inefficiency/efficiency (MU) (Normative Sales-Actual Re-casted Sales)	34.76	24.51	(111.87)
Approved Distribution Loss (%)	14.50%	14.50%	14.50%
Total Normative Sales (MU)	11888.48	11802.18	11802.18

Further, since distribution loss is a controllable parameter, the Commission has carried out the sharing of the impact of excess distribution loss in accordance with the provisions of UERC Tariff Regulations, 2015.

3.1.3 *Power Purchase Expenses (Including Transmission Charges)*

The comparison of source wise power purchase quantum and cost as approved by the Commission in the Tariff Order for FY 2018-19 and actual as claimed by UPCL for FY 2018-19 is as shown in the Table below:

Table 3.21: Power Purchase Cost approved in the Tariff Order Vs Actual Power Purchase Cost for FY 2018-19 (Rs. Crore)

Source	Approved in the Tariff Order			Claimed by UPCL		
	Quantum (MU)	Total cost (Rs. Crore)	Rate (Rs./kWh)	Quantum (MU)	Total cost (Rs. Crore)	Rate (Rs./kWh)
UJVN Ltd.*	4354.05	944.78	2.17	4163.64	829.20	1.99
NHPC	817.27	258.47	3.16	752.75	272.77	3.62
THDC	672.47	180.55	2.68	679.40	242.77	3.57
NTPC	2845.74	955.86	3.36	2129.75	756.21	3.55
NPCIL	305.94	105.54	3.45	305.09	118.61	3.89
Vishnu Prayag	227.33	43.9	1.93	205.70	39.71	1.93
SJVNL	284.86	101.67	3.57	230.62	93.64	4.06
Sasan UMPP	690.27	95.4	1.38	694.73	103.83	1.49
Gas IPPs	2718.81	1504.72	5.53	1223.35	1,025.67	8.38
Other IPPs	1509.56	663.19	4.39	1238.27	719.45	5.81
Deficit Purchase including UI	-	-	-	2184.08	1060.31	4.85
Net Banking Received/(returned)	-	-	-	30.12	-	-
STOA Charges	-	31.89	-	-	-	-
RPO	158.03	46.46	2.94	-	-	-
PTCUL	-	209.3	-	-	311.88	
PGCIL	-	388.08	-	-	437.10	
Total	**14584.35**	**5529.81**	**3.79**	**13837.49**	**6011.15**	**4.34**

**Including water tax, cess, royalty and recovery of past arrears.*

The Petitioner further submitted that it has reduced revenue towards sale of surplus power amounting to Rs. 138.37 Crore and carried out adjustment of Rs. 100.74 Crore towards excess free power allowed earlier and has, accordingly, claimed net power purchase cost of Rs. 5023.70 Crore excluding transmission charges.

With regard to Intra-State transmission charges, the Commission observed that the Petitioner has booked cost of Rs. 99.82 Crore towards transmission charges pertaining to 400 kV Sub-station at Srinagar which also includes arrears for FY 2016-17 and FY 2017-18 along with the charges for FY 2018-19. The Commission is of the view that as the cost was allowed to be recovered in FY 2019-20, therefore, the same should not form part of ARR of FY 2018-19. The Commission, therefore, has not included the transmission charges of Rs. 99.82 Crore while approving the Intra-State Transmission charges for FY 2018-19. The Petitioner is advised to claim the same during truing up proceedings for FY 2019-20.

The Commission for allowing the power purchase cost has relied upon the cost booked in the audited accounts and approves the power purchase cost as follows:

Table 3.22: Power Purchase Cost claimed by UPCL and approved by the Commission for FY 2018-19 (Rs. Crore)

Particulars	Claimed by UPCL	Approved by the Commission
Power Purchase Expenses	5023.07	5023.07
Transmission Charges-PGCIL	437.10	437.10
Intra-State Transmission & SLDC Charges	311.88	212.06
Total Power Purchase Cost	**5772.04**	**5672.23**

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

O&M expenses comprises of Employee Expenses, A&G Expenses and R&M Expenses, i.e. expenditure on staff, administration and general expenses and repairs and maintenance etc. For estimating the O&M expenses for the second Control Period, Regulation 62 of UERC Tariff Regulations, 2015 specifies as under:

"(1) The O&M expenses for the first year of the Control Period will be approved by the Commission taking into account the actual O&M expenses for last five years till Base Year subject to prudence check and any other factors considered appropriate by the Commission.

(2) The O&M expenses for the nth year and also for the year immediately preceding the Control Period, i.e. FY 2015-16, shall be approved based on the formula given below:-

O&Mn = R&Mn + EMPn + A&Gn

Where –

- *O&Mn – Operation and Maintenance expense for the nth year;*
- *EMPn – Employee Costs for the nth year;*
- *R&Mn – Repair and Maintenance Costs for the nth year;*
- *A&Gn – Administrative and General Costs for the nth year;*

(3) The above components shall be computed in the manner specified below:

EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)

R&Mn = K x (GFAn-1) x (1+WPIinflation) and

A&Gn = (A&Gn-1) x (1+WPIinflation) + Provision

Where -

- *EMPn-1 – Employee Costs for the (n-1)th year;*
- *A&G n-1 – Administrative and General Costs for the (n-1)th year;*

- *Provision: Cost for initiatives or other one-time expenses as proposed by the Transmission Licensee and approved by the Commission after prudence check.*
- *'K' is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on Transmission Licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;*
- *CPI inflation – is the average increase in the Consumer Price Index (CPI) forimmediately preceding three years;*
- *WPI Inflation - is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;*
- *GFAn-1 – Gross Fixed Asset of the Transmission Licensee for the n-1th year;*
- *Gn is a growth factor for the nth year. Value of Gn shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on Transmission Licensee's filings, benchmarking and any other factor that the Commission feels appropriate:*

Provided that in case of a transmission licensee is governed by Government pay structure, the Commission may consider allowing a separate provision in Employee expenses towards the impact of VIIth Pay Commission.

Provided that repair and maintenance expenses determined shall be utilised towards repair and maintenance works only."

3.1.4.1 Employee Expenses

The Petitioner submitted that the actual gross and net employee expense as per audited account is Rs. 412.57 Crore and Rs. 341.58 Crore respectively, which also includes actual payment of of Rs. 17.01 Crore towards arrears of Seventh Pay Commission.

The Petitioner submitted that the normative employee expenses for FY 2018-19 has been arrived at as per the methodology adopted by the Commission in its previous orders in accordance with UERC Tariff Regulations, 2015. The Petitioner further submitted that the opening EMPn-1 has been considered as Rs. 351.76 Crore as approved by the Commission in truing up of FY 2017-18 and

CPI inflation has been considered as the average increase in the consumer price index for the preceding three years.

The Petitioner submitted that it has paid an additional amount of Rs. 12.18 Crore booked in the audited accounts of FY 2018-19 for enhanced pension which was on account of pay revision in the third time scale with effect from 01.01.1996 due to which pension and family pension was revised for the employees who retired between 01.01.1996 and 20.07.2010. The Petitioner further submitted that since the enhanced pension was not included in the base employee expenses and is a statutory liability for the Petitioner, the same has been claimed additionally in FY 2018-19.

The Petitioner submitted that the number of employees has reduced to 2779 by the end of FY 2018-19 on account of retirements, therefore, the growth factor has been considered as zero. Further, actual capitalization rate as per the audited accounts have been considered for arriving at the normative employee cost.

The Petitioner has claimed the normative employee expenses for FY 2018-19 of Rs. 332.89 Crore as shown in the Table below:

Table 3.23: Revised Employee Expenses as claimed by the Petitioner (Rs. Crore)

Particulars	FY 2018-19
Emp_{n-1}	351.76
Inflation Factor	4.28%
Growth Factor	0.00%
Gross Employee Expenses	366.82
Capitalisation Rate	17.21%
Less: Employee Expenses Capitalised	63.12
Net Employee Expenses	303.70
Impact of enhanced pension	12.18
Impact of Seventh Pay Commission	17.01
Total Employee Expenses	**332.89**

The Commission in its Order dated March 21, 2018 had re-worked the normative employee expenses for FY 2018-19 in accordance with UERC Tariff Regulations, 2015. The Commission in the said Order had considered the gross normative employee expenses approved in the true up for FY 2016-17 for projecting the employee expense for FY 2017-18 and FY 2018-19. The Commission had further directed in its Order dated March 21, 2018 that the truing up of FY 2018-19 shall be carried out based on the actual impact of VII Pay Commission including arrears and no sharing of gains and losses on this account would be allowed. The Commission had approved the trued up normative gross employee expenses of Rs. 351.76 Crore for FY 2017-18. Considering the same as the base and in accordance with the UERC Tariff Regulations, 2015, the Commission has computed the normative employee expenses for FY 2018-19. Regarding the growth factor, the Commission observed that the number of employees of UPCL has reduced from FY 2017-18 to FY 2018-19 as the number of retirement of employees outpaced the recruitment of employees during the year. The Commission has, therefore, considered Gn as zero. The employee expenses so computed has then been escalated by the CPI inflation of 4.34%.

The Commission further observed that a cost of Rs. 0.18 Crore was booked towards subsidised electricity provided to employees and pensioners of UPCL. The Commission in its Order dated March 21, 2018 with regard to accounting of concessional supply to its employees had ruled that if UPCL intends to give benefit of concessional electricity supply to its employees it can do so at its own expense and the same cannot be passed on to the consumers. The Commission in the said Order directed the Petitioner as follows:

> *"Accordingly, the Commission further to streamline the accounting of departmental employee consumers directs the Petitioner to bill all departmental employees consumers including pensioners on the basis of rates approved for RTS-1 Domestic Category from April 01, 2018. The Petitioner shall include the consumption and revenue details of these consumers at the Tariff Rates applicable to domestic consumers in the monthly CS-3 and CS-4 statements. As regards the concession provided to these consumers, the Petitioner is directed to show the same separately as expenses in its accounts."*

The Commisison has, therefore, deducted the above amount for computing actual employee expenses for FY 2018-19. **UPCL is once again directed to ensure compliance of the directions of Commission given in the Tariff Order dated March 21, 2018 in this regard failing which action may be taken against it for non-compliance of the orders of the Commission.**

The Petitioner has worked out the rate of capitalisation based on the actual employee expenses capitalized and actual gross employee expenses (which include arrears paid towards implementation of VII Pay Commission and enhanced pension) for FY 2018-19. However, for working out the normative employee expenses for FY 2018-19, UPCL has applied this capitalisation rate on gross employee expenses which does not include arrears paid towards implementation of VII Pay Commission and enhanced pension. Therefore, there is a flaw in the methodology of UPCL. The Commission has computed the capitalisation rate of employee expenses as worked out on the basis of audited accounts of FY 2018-19 based on the actual employee expenses capitalized and actual gross employee expenses excluding arrears paid towards implementation of VII Pay Commission and enhanced pension for FY 2018-19. Further, in line with the approach adopted by the Commission in the true up for FY 2017-18, the Commission has considered the impact of arrears of Pay Commission and enhanced pension as claimed by UPCL considering the same as a statutory liability of the Petitioner. However, the Commission would again like to caution the Petitioner that any further allowance or incentives or benefits granted to its employees will have to be borne by UPCL from its own resources or through increased efficiency. Further, UPCL is also advised to align its methodologies while submitting the claims in line with the views of the Commission.

The normative employee expense approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 3.24: Approved Employee Expenses for FY 2018-19 (Rs. Crore)

Particulars	Approved in the Tariff Order	Actual as per Audited Accounts	Actual for truing up	Normative	
				Claimed by UPCL	Approved
EMPn-1	352.53	341.58	341.40	351.76	351.76
Gn	0.00%			0.00%	0.00%
CPIinflation	5.35%			4.28%	4.34%
EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)	**371.39**			**366.82**	**367.02**
Capitalisation rate	17.44%			17.21%	18.52%
Less: Employee expenses capitalized	64.78			63.13	67.97
Net Employee Expenses	**306.62**			**303.70**	**299.06**
Impact of enhanced Pension & Pay Commission	45.19			29.19	29.19
Total Employee Expenses	**351.80**	**341.58**	**341.40**	**332.89**	**328.25**

3.1.4.2 Repair and Maintenance

The Commission had approved the R&M expenses of Rs. 125.98 Crore for FY 2018-19 in its Order dated March 21, 2018. As against the same, the actual R&M expenses for FY 2018-19 as per the audited accounts are Rs. 137.66 Crore. The Petitioner submitted that the Commission, on account of non-submission of Electrical Inspector Certificates, had disallowed capitalisation of Rs. 96 Crore in FY 2016-17 and Rs. 391 Crore in FY 2017-18. The Petitioner stated that the pending Electrical Inspector Certificate for FY 2016-17 and FY 2017-18 shall be submitted during the present tariff proceedings. Accordingly, the Petitioner requested that actual R&M expenses based on the audited annual accounts may be trued by the Commission.

The Commission in its Order dated March 21, 2018 had considered the 'K' factor of 2.67% for computation of the normative R&M expenses for FY 2018-19 in accordance with the UERC Tariff Regulations, 2015 and its MYT Order for FY 2016-17 to FY 2018-19. The Commission while carrying out the true up of FY 2017-18 and in the current proceedings have already provided enough opportunity to the Petitioner for submission of Electrical Inspector Certificate for assets capitalized during FY 2016-17 and FY 2017-18. The Petitioner in the current proceedings has submitted Electrical Inspector Certificiates for some of the HT works capitalised during FY 2016-17 to FY 2018-19 and has also submitted details of some of the LT works capitalised during FY 2016-17 and FY 2017-18. The Commission has considered the same for truing up of R&M expenses for FY 2018-19. Further, works for which the Petitioner has not submitted the EI Certificates, the Commission has not considered such capitalization which were disallowed in true up of FY 2016-17 and FY 2017-18 for computation of R&M Expenses in accordance with its approach adopted in the previous Orders as the Petitioner is not entitled to charge/energise any HT works without obtaining clearances from the Electrical Inspector for such works and, hence, such assets pending clearances cannot be capitalized.

The Commisison further observed that the Petitioner had booked certain Annual Maintenance Contract (AMC) expenses amounting to Rs. 3.54 Crore in A&G Expenses. As these expenses are in the nature of R&M Expenses, the same has been considered as a part of actual R&M Expenses.

The Commission for truing up of FY 2018-19 has considered the same K factor and has reworked the R&M expenses considering the Opening GFA for FY 2018-19. The Commission has considered the inflation factor as 0.33%, as the average of WPI inflation for the preceding three years of FY 2018-19. The normative R&M expenses trued up by the Commission for FY 2018-19 is as shown in the Table below:

Table 3.25: Approved R&M Expenses for FY 2018-19 (Rs. Crore)

Particulars	Approved in the Tariff Order	Actual as per Audited Accounts	Actual Approved	Normative	
				Claimed by UPCL	Approved
R&M Expenses	125.98	137.66	141.20	137.66	121.90

3.1.4.3 A&G Expenses

The Commission had approved the A&G expenses of Rs. 27.79 Crore for FY 2018-19 in its Tariff Order dated March 21, 2018. As against the same, the actual net A&G expenses for FY 2018-19 as per the audited accounts were Rs. 47.48 Crore, which is inclusive of Rs. 1.74 Crore paid against penalty imposed by the Commission. The Petitioner submitted that the actual A&G expense consists of cost of data centre and other expenses relating to R-APDRP projects which are primarily towards annual maintenance charges for the software and hardware installed under the various R-APDRP works, facility management system (FMS) etc. The Petitioner further submitted that since these costs were not included as part of the overall project cost, these expenses are being borne by the Petitioner over and above the normative A&G expenses. Moreover, since such costs have been incurred post the commissioning of RAPDRP works, therefore, the same were not included as part of the base year A&G expenses used for second Control Period. Accordingly, the Petitioner submitted that since there has been a significant increase in actual A&G expenses of FY 2018-19, the Commission may true up actual A&G Expenses incurred of Rs. 47.48 Crore on the basis of audited accounts rather than on normative basis. The actual expenses claimed includes cost against data centre of Rs. 11.25 Crore and Licence fee of Rs. 3.30 Crore.

An amount of Rs. 14.79 Crore has been incurred against annual maintenance charges of software and hardware installed under various R-APDRP works and facility management system (FMS) etc. and also includes operational expenses primarily . The Petitioner further submitted that these expenses are primarily towards annual maintenance charges for the software and hardware installed under the various R-APDRP works, operational expenses namely bandwidth charges, software license renewal charges, etc. and are part of A&G expenses.

The Commission in its Order dated March 21, 2018 had re-worked the normative A&G expenses for the second Control Period in accordance with UERC Tariff Regulations, 2015. The Commission had considered the normative A&G expenses approved in the true up for FY 2016-17 for projecting the A&G expense for FY 2017-18 and FY 2018-19 in addition to allowing provisions for revenue expenses towards various R-APDRP works, facility management system (FMS) etc. on actual basis. The Commission in this Order has considered the same approach for computing A&G expenses for FY 2018-19. The Commission had considered WPI inflation as 0.33% which is the average of WPI Inflation for the preceding three years of FY 2018-19, i.e. FY 2015-16 to FY 2017-18.

The Commission has considered the capitalisation of expenses in the same proportion of actual capitalisation of expenses to the actual gross A&G expenses excluding provision & licence fees.

The Commission with regards to actual A&G expenses for FY 2018-19 sought following information from the Petitioner:

- Reason for abrupt increase under the following heads vis-a-vis FY 2017-18.
    - Increase in Rent and Lease expenses form Rs. 0.48 Crore to Rs. 1.09 Crore.
    - Increase in Compensation towards death and damages from Rs. 0.98 Crore to Rs. 2.30 Crore along with the reason for allowing compensation paid for death and damages.
    - Increase in other professional charges from Rs. 0.93 Crore to Rs. 5.39 Crore.
    - Increase in Conveyance Charges from Rs. 1.46 Crore to Rs. 7 Crore.
- Confirmation of whether electricity charges of Rs. 10.28 Crore do not include concessional supply to its employees and are only towards its offices.
- Details of the bandwidth, software licence renewal charges of Rs. 11.25 Crore.
- Details of Miscallaneous Charges of Rs. 4.40 Crore.
- Details of Consultancy Charges .
- Nature of expenses booked under the head “Cleaning Expenses”.

In reply the Petitioner submitted as follows:

- With regard to increase in Rent and Lease Charges, the Petitioner submitted that it has indavertently shown the amount as Rs. 1.04 Crore instead of Rs. 0.60 Crore.
- For increase in compensation towards death and damages, the Petitioner submitted that UPCL is required to pay compensation to outsiders for fatal & non-fatal electrical accidents, fatal accidents of cattle and also to employees of UPNL, SHG’s & PRD engaged in UPCL on contractual basis. Such expenses are incidental to the main activity of distribution of electricity by UPCL. The compensation payable on account of the above activities is duly approved by the BOD (OM No. 283 dated 24.01.2018). It further submitted that the amount is as per the actual expenses incurred in FY 2018-19 and the

increase is on account of revised compensation norms as per OM no. 283 dated 24.01.2018.

- With regard to increase in professional charges, the Petitioner submitted that the said booking made under the heads "Other Professional Charges" & "Consultancy charges" as shown in the following Table are of similar nature and requested that for the purpose of review the combined expenditure maybe considered.

Table 3.26: Year on Year Increase in the Total Consultancy and Professional Charges (Rs. Crore)

S.No.	Particulars	FY 2018-19	FY 2017-18	Increase/Decrease
1.	Consultancy Charges	2.82	5.46	(2.65)
2.	Other Professional Charges	5.39	0.93	4.46
Total		**8.21**	**6.39**	**1.81**

- The Petitioner submitted that the actual expenditure under the head "Conveyance charges" is Rs. 5.68 Crore in FY 2017-18 against Rs. 1.46 Crore submitted in the Form. The amount of Rs. 1.46 Crore has been inadvertently submitted. Hence, on comparing the expenditure under this head a nominal incremental change is observed. The expenditure under this head of Rs. 7 Crore pertains to the conveyance charges incurred by UPCL during FY 2018-19.

- With regards to the electricity charges, the Petitioner confirmed that such cost does not include any other consumption other than its offices.

- With regards to payment of Rs. 11.25 Crore made towards upkeep and maintenance of data centre, the Petitioner submitted soft copies of the bills.

- Wth regard to details of Miscellaneous Charges, the Petitioner submitted that the Miscellaneous expenses includes Administrative charges of Rs. 0.78 Crore paid to EPF department on EPF contribution @ 0.5%. Besides above, various expenses which were not grouped under any other specific head have been booked by the field units. The expenses comprise of event organisation expenses, Nagar Nigam taxes, inauguration expenses of various Govt. schemes etc.

- With regards to Cleaning Expenses, the Petitioner submitted that after the implementation of GST, the payment to part time sweepers for cleaning purposes fell under Reverse Charge Mechanism (RCM) as per GST Act, therefore, a new expense head was created to segregate such expenses in accordance with the statutory requirement. Such RCM was effective from 01.07.2017 onwards but was discontinued w.e.f. 13.10.2017. The Petitioner further submitted that the expenditure pertaining to cleaning was earlier booked under miscellaneous expenses in the Trial Balance but due to the requirement of the GST Act, a separate head was created. Although the statutory requirement of the same is over, the particular head of accounts under the Trial Balance is being continued and expenses pertaining to the part time sweeper/Cleaning expenses are booked under this head.

The Commission has considered operational expenses like bandwidth charges, software license renewal charges incurred on these RAPDRP works including FMS and data centre of Rs. 11.25 Crore but has not considered AMC of hardware as the same should be booked under the head of R&M expenses. The Commission, as discussed above has already added the AMC cost of Rs. 3.54 Crore in the R&M expenses.

The past trends in few expenses booked under A&G expenses shows that these expenses are increasing substantially as given in the Table below:

Table 3.27: Expenses booked under A&G expenses (Rs. Crore)

S.No.	Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
1.	Compensation for death and damages	-	0.36	0.44	0.67	-	0.98	2.30
2.	Consultancy and other Professional Charges	2.06	3.40	3.01	3.02	6.22	6.39	8.20
3.	Electricity Charges to Offices	3.20	3.79	6.77	4.65	5.23	9.63	10.28

As can be seen from the Table above, compensation awarded for death and damages which was Rs. 0.36 Crore in FY 2013-14 has increased to Rs. 2.30 Crore. The Petitioner has attributed the increase to the increase in compensation norms, however, even considering the same the increase is also attributable to the increase in the number of accidents due to improper maintenance of lines/transformers or due to ignorance of safety issues as has been the case with UPCL, as it is charging its HT works without getting them cleared by Electrical Inspector. Similarly, consultancy charges which was Rs. 2.06 Crore in FY 2012-13 has increased to Rs. 8.20 Crore without yielding much material benefits. Hence, **UPCL is directed to refrain from carrying out such ineffective consultancies which merely increases its expenditure. UPCL is required to make a proper proposal requiring consultancy assignments to be carried out and the benefits that would accrue**

from the same and then weigh the cost with the benefits failing which the Commission will be constrained to disallow the costs of such assignments. Similarly, the electricity charges to its offices are also increasing significantly which needs to be controlled and should be corroborated by units billed in its subsequent tariff proceedings. At present, the Commission is not adjusting the said amount.

Further, the Commission has considered Licence fees of Rs. 3.30 Crore paid by the Petitioner in FY 2018-19. The Commission would like to caution the Petitioner to control its A&G expenses and exercise proper prudence in incurring the same.

The normative A&G expense including licence fees and data centre cost approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 3.28: Normative A&G expenses for FY 2018-19 (Rs. Crore)

Particulars	Claimed	Allowable
A&Gn-1	-	28.52
WPIinflation	-	0.33%
Gross A&G expenses	62.69	28.61
Capitalisation rate	24.26%	35.48%
Less: A&G expenses capitalised	15.21	10.15
Net A&G expenses	**47.48**	**18.46**
Provision & License fee	-	14.55
A&Gn = A&Gn-1 x (1+WPIinflation) + Provision	**47.48**	**33.01**

The A&G expense claimed and approved by the Commission for truing up including licence fees and data centre cost approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 3.29: Approved A&G expenses for FY 2018-19 (Rs. Crore)

Particulars	Approved in the Tariff Order	Actual as per Audited Accounts	Actual adjusted for sharing*	Normative	
				Claimed by UPCL	Approved
A&G expenses	27.79	47.48	42.20	47.48	33.01

**After excluding Rs. 1.74 Crore booked towards penalty and Rs. 3.54 Crore towards AMC.*

Accordingly, the Commission has allowed the O&M Expenses as shown in the Table below:

Table 3.30: Approved O&M Expenses for FY 2018-19 (Rs. Crore)

S. No.	Particulars	Approved in the Tariff Order	Actual as per Audited Accounts	Actual Adjusted for sharing	Normative	
					Claimed by UPCL	Approved
1.	Employee expenses	351.80	341.58	341.40	332.89	328.25
2.	R&M expenses	125.98	137.66	141.20	137.66	121.90
3.	A&G expenses	27.79	47.48	42.20	47.48	33.01
Total		**505.57**	**526.72**	**524.80**	**518.03**	**483.16**

The normative O&M expenses approved by the Commission in the true up are lower in comparison to the normative O&M expenses approved in the Tariff Order mainly on account of variation in CPI and WPI Inflation and Gn factor of employees becoming zero.

As O&M expenses are controllable in nature, the Commission has further carried out sharing on account of actual and normative O&M expenses in the subsequent section of this Order.

3.2 Cost of Assets and Financing

3.2.1 *Capital cost of Original Assets*

As regards the capital cost of original assets, the Commission vide its Order dated April 11, 2015 held as under:

*"**3.2.5.1 Capital Cost of Original Assets***

The Commission observed that the issue of original value of fixed assets for the Petitioner examined in detail in Paras 5.3.1 and 5.3.2 of the Order dated April 25, 2005. For reasons provided in the said Order, the original value of GFA as on November 09, 2001 was fixed at Rs. 508 Crore for the Petitioner, instead of the value of Rs. 1058.18 Crore assigned in the Provisional Transfer Scheme. The Commission had already recorded the reasons for the same in its previous Tariff Orders. Since, there is no change in the factual position and the matter is pending before the Hon'ble ATE, the Commission decides to maintain Status-quo ante."

In this regard, Hon'ble ATE in its Judgment dated May 18, 2015 in Appeal No. 180 of 2013 ruled as under:

"25. We feel that since it is matter of transfer scheme and apportioning of value of assets between two States after reorganization, the Appellant should take up the matter with State Government for issuance of notification on transfer of assets to Uttarakhand from UP. Accordingly decided."

In light of the Judgment of the Hon'ble ATE, the Commission in its Tariff Order dated April 05, 2016 did not find the need to revise the capital cost of original assets from the earlier approved value of Rs. 508 Crore for the Petitioner.

The Commission vide its Order dated April 05, 2016, March 29, 2017, March 21, 2018 and February 27, 2019 has already carried out the truing up till FY 2017-18. The year wise GFA addition allowed by the Commission till FY 2017-18 is as shown below:

Table 3.31: Assets base approved by the Commission (Rs. Crore)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015 -16	FY 2016-17	FY 2017-18
Opening Balance	1227.76	1540.46	1698.88	2019.76	2449.87	2787.04	3017.55	3202.56	3695.78	3980.56	4122.71
Net additions	312.69	158.42	320.88	430.11	337.17	230.50	185.01	493.22	284.78	142.15	6.53
Closing Balance	**1540.46**	**1698.88**	**2019.76**	**2449.87**	**2787.04**	**3017.55**	**3202.56**	**3695.78**	**3980.56**	**4122.71**	**4129.24**

With regard to FY 2018-19, the Petitioner has claimed a net capitalisation of Rs. 937.73 Crore as per audited accounts. The Petitioner was directed to submit the segregation of fixed assets added into HT and LT works and to submit the Electrical Inspector clearance for HT works for FY 2018-19 alongwith all the pending capitalisation which were disallowed in FY 2016-17 and FY 2017-18. The Petitioner has only submitted EI certificates for some of the works along with amount of LT works carried out from FY 2016-17 to FY 2018-19.

Table 3.32: Pending Electrical Inspector Certificates (Rs. Crore)

Particulars	Gross Capitalisation	Trued Up in Previous Orders	Details Provided now	Total Submitted	Balance Pending
FY 2016-17	321.99	225.85	68.48	294.33	27.66
FY 2017-18	465.14	6.53	352.74	359.27	105.87
FY 2018-19	1009.90	-	494.04	494.04	515.86
Total	**1797.03**	**232.38**	**915.26**	**1147.64**	**649.39**

The Commisison in its previous Tariff Orders has been approving capital expenditure and capitalisation only once the assets have been put to use and for HT Works post verification and certification by Electrical Inspector. It is surprising to note that the Petitioner is not in a position to submit the complete EI certificates for works carried out in FY 2016-17 and FY 2017-18 and it continues with commissioning and capitalising all HT works without getting them inspected and approved by the Electrical Inspector which is in gross violation of the Electricity Rules and the same cannot be allowed. The Commission time and again has directed the Petitioner to charge all the HT works only after getting clearances from the Electrical Inspector. The Petitioner on one hand is making submissions before the Commission that it is facing severe cash flow issues and on the other hand is not interested in recovering the legitimate ARR by furnishing capitalisation details. This exhibits a callous and indifferent approach in furnishing the clearance of HT works by Electrical Inspector for FY 2016-17, FY 2017-18 and FY 2018-19 and also in segregation of LT & HT works. Since, the delay is on account of the inefficiency of the Petitioner, hence, no carrying cost will be allowed to the Petitioner for delayed approval of pending capitalisation of FY 2016-17 & FY 2017-18. **The Commission is further of the view that unless the complete capitalisation details for FY 2016-17 and FY 2017-18 is provided, truing up for these years shall not be done. The Commission has, however, allowed the impact of capitalisation details submitted for FY 2016-17 and FY 2017-18 in the truing up for FY 2018-19.**

The Petitioner had been insisting on using Net additions to the GFA, i.e. Gross Additions minus deletion/de-capitalisation as it submitted that the assets forming part of the GFA are decapitalised for repairs and maintenance, etc, and are then added back. Hence, Electrical Inspector Certificates for the same asset cannot be provided twice. However, this submission of the Petitioner itself appears erroneous considering the additions of FY 2016-17, where Gross addition to GFA is Rs. 321.99 Crore and deletions are Rs. 83.70 Crore resulting in Net asset Additions of Rs. 238.29 Crore. However, as is evident from Table 3.32 above, the Petitioner has submitted the Electrical Inspector Certificates of Rs. 294.33 Crore which are more than the value of net additions to the GFA. Hence, the Petitioner is advised to reconcile the same or provide balance certificates of Rs. 27.66 Crore, only then the Commission will allow the additions to the GFA. Accordingly, the Commission has considered net GFA addition for FY 2016-17 as Rs. 210.63 Crore.

The Commission observes that the Petitioner has capitalised assets amounting to Rs. 0.36 Crore in FY 2018-19 towards Furniture & Fixtures and Vehicles for which Electrical Inspector's Certificate is not required. The Commission has, therefore, approved additional capitalisation of Rs. 494.41 Crore for FY 2018-19. The Commission has also considered the Decapitalisation of assets of Rs. 72.17 Crore in FY 2018-19.

The Commission has, therefore, approved Opening GFA and net additions for FY 2018-19 as follows:

Table 3.33: Assets base approved by the Commission (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Balance	3980.56	4191.19	4550.46
Net additions	210.63	359.27	422.23
Closing Balance	**4191.19**	**4550.46**	**4972.70**

3.2.2 *Financing of Capital Cost*

3.2.2.1 Truing Up of Capital Related Expenses for FY 2018-19

The Petitioner has claimed net GFA addition of Rs. 937.73 Crore for FY 2018-19. The means of finance submitted by the Petitioner is shown in the Table below:

Table 3.34: Means of Finance for FY 2018-19 as submitted by the Petitioner (Rs. Crore)

Particulars	Amount
Loan	237.10
Deposit Works	570.07
Grant	
Internal resources	130.56
Total	**937.73**

As discussed above, the Commission has approved net additional capitalisation of Rs. 422.23 Crore for FY 2018-19. The means of finance as approved by the Commission is as follows:

Table 3.35: Means of Finance as approved by the Commission for FY 2018-19 (Rs. Crore)

Particulars	Amount
Loan	106.76
Grant/Deposit Works	256.69
Equity	58.79
Total	**422.23**

3.2.2.2 Interest and Finance Charges

The Petitioner has claimed Interest and Finance Charges of Rs. 144.02 Crore for FY 2018-19 against the amount of Rs. 138.47 Crore approved by the Commission in the Tariff Order dated March 21, 2018.

The Petitioner submitted that it has claimed interest expenses as per the audited accounts after considering the following adjustments:

a) Interest on REC (Old) loans has been taken in accordance with the re-schedulement package of REC (Old) loans determined by the Commission in its Tariff Order for FY 2009-10 dated 23rd October, 2009.

b) Government Guarantee fees has been considered as per the audited accounts.

c) Interest on consumer security deposit has been claimed as per the actual interest paid.

d) The Petitioner has not considered the interest on GPF. However, the Petitioner requested the Commission to allow interest on GPF as part of interest expense as this is the statutory liability of the Petitioner. The Petitioner submitted that the Government of Uttarakhand (GoU) has in the past refused to provide support on account of Interest on GPF. The Petitioner added that GoU is already bearing the terminal liability of the old employees unlike other States. The Petitioner, further, requested the Commission that in case the interest on GPF has to be borne by the State Government, the Commission should issue suitable directions to GoU in this regard.

e) Provision for interest on PFC loans towards R-APDRP Part A and Part B has been excluded as these loans shall be converted to grants after successful implementation of the works.

f) Other financial and bank charges have been considered after reducing the interest on overdraft / short term loans.

g) Actual interest accrued during the year has been claimed which is net off capitalisation as follows:

Table 3.36: Interest expense on capital loans as submitted by the Petitioner for FY 2018-19 (Rs. Crore)

Particulars	As per Accounts
Net Interest Expenses as per Accounts	**213.27**
Less:	
Interest on GPF	35.08
Interest on Old REC Loans	11.49
Interest on Consumer Security Deposits	46.09
Guarantee Fee	3.04
Interest on Bank Short Term Loan/ Overdraft	41.02
Bank Charges & Other Commission	3.52
Net Interest Expense Claimed towards Capitalized Assets	**73.04**

Regulation 27 of the UERC Tariff Regulations, 2015 stipulates the methodology for computation of interest expenses. The Commission in accordance with the above Regulations has worked out the Interest and Finance Charges for FY 2018-19 considering the loan amount corresponding to the assets capitalised in the year based on the approved means of finance, and the interest rate of 10.23% computed on the basis of weighted average interest rate on the actual loan portfolio.

The Petitioner has again requested the Commission to allow interest on GPF as part of interest expenses as the same is a statutory liability of the Petitioner. The Commission in the past has not allowed such expenses for reasons given in the respective Orders. Hence, the Commission again disallows the interest claimed on GPF.

The Petitioner has claimed interest liability on consumers' security deposits (CSD) for FY 2018-19 as Rs. 46.09 Crore. The Commission sought the actual amount of interest on consumer security deposit paid. The Petitioner in its reply submitted that actual payment towards the same was Rs. 39.38 Crore. The Commission has approved the interest on CSD for FY 2018-19 as Rs. 39.38 Crore on cash basis.

Further, the interest on REC Old Loan has been allowed as claimed by UPCL. The Petitioner has claimed guarantee fee of Rs. 3.04 Crore for FY 2018-19. The Commission in its information requirement, sought from the Petitioner the details of penalty or provisions included in the claimed amount. The Petitioner in its reply submitted that the claimed amount included a provision of penalty of Rs. 1.52 Crore. The Commission has only considered the guarantee fee of Rs. 1.52 Crore due for FY 2018-19 and has not considered the provisions made for payment of penalty on non-payment of guarantee fee as the same has been allowed by the Commission every year.

The Commission has worked out the Interest and Finance Charges for FY 2018-19 considering the loan amounts corresponding to the assets capitalised in the year based on the approved means of finance, as shown in the Table below:

Table 3.37: Interest and Finance Charges approved for FY 2018-19 (Rs. Crore)

Particulars	Tariff Order	Claimed by UPCL	Approved
Interest on Loan corresponding to assets capitalised	63.58	73.04	59.40
REC Old Loan	18.33	18.33	18.33
Interest on Normative Loans	-	-	-
Guarantee Fee & Financing Charges	5.59	3.04	1.52
Financing Charges	1.70	3.52	3.52
Interest on Security Deposit	49.27	46.09	39.38
Net Interest and Finance Charges	**138.47**	**144.02**	**122.15**

3.2.2.3 *Depreciation*

The Petitioner in its Petition has submitted that it has calculated depreciation considering the closing GFA for FY 2017-18 and actual net capitalisation for FY 2018-19. Further, the rate of depreciation considered by it was as specified in UERC Tariff Regulations, 2015. The Petitioner has computed depreciation at the rate of 5.21% for FY 2018-19. The Petitioner has, accordingly, claimed total depreciation of Rs. 122.60 Crore as against Rs. 142.42 Crore approved by the Commission in the Tariff Order for FY 2018-19.

The Commission has allowed depreciation at a weighted average rate of 5.20% based on the audited balance sheet for FY 2018-19. As discussed in the previous section, the Commission has not considered the capitalisation of such assets during FY 2016-17 and FY 2017-18 which did not have Clearance certificate from Electrical Inspector. Further, the Commission has been allowing depreciation on the value of opening GFA keeping in line with the practice being followed by the Petitioner of capitalising the asset in its accounts on the last day of the financial year. The Tariff Regulations of the Commission provides for depreciation on pro-rata basis, however, the Petitioner in its accounts calculates depreciation on the opening GFA as is evident from its Notes to Accounts. Therefore, the Commission finds no justification to depart from the practice adopted in the previous Tariff Orders of allowing depreciation on the opening balance of GFA. The Commission directs the Petitioner to claim depreciation in line with its practice followed in the accounts as it capitalises the assets on the last day of the Financial Year.

The Commission in its data gaps sent to the Petitioner asked it to confirm that the depreciation claimed is not in excess of 90% of its assets. The Petitioner in its reply confirmed that depreciation in FY 2018-19 has been less than 90% of the GFA for all the assets in accordance with the UERC Tariff Regulations, 2015. Further, it appears that the Petitioner in its Petition has considered higher grants while working out the depreciable GFA as compared to the value of grants furnished to the Commission in previous proceedings. Hence, despite disallowance of capitalisation of about Rs. 650 Crore by the Commission due to non-avaliability of clearances from Electrical Inspector, the depreciable GFA claimed by the Petitioner works out to lower than that allowed by the Commission and, consequently, the depreciation claimed by the Petitioner is lower than that trued up by the Commission. **The Petitioner in this regard is directed to reconcile the value of grants so considered by it and that furnished to the Commission for working out the financing of the assets and submit the same in the next tariff proceedings.**

The depreciation approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 3.38: Depreciation approved for FY 2018-19 (Rs. Crore)

Particulars	Tariff Order	Claimed by UPCL	Approved
Opening GFA	4668.73	4616.42	4550.46
Grants	1937.10	2447.01	1880.42
Depreciable opening GFA	2731.63	2169.41	2670.05
Net addition during the year	357.27	367.66	0.00
Closing GFA	3088.90	2537.07	2835.59
Depreciation Rate	5.21%	5.21%	5.20%
Depreciation	**142.42**	**122.60**	**138.82**

3.2.3 *Provisions for Bad and Doubtful Debts*

The Petitioner in its Petition has submitted that the Commission in the MYT Order dated April 05, 2016 did not allow any provisioning of bad debts for earlier years.

The Petitioner submitted that the annual provision towards bad & doubtful debts is an accepted method of accounting and considering the peculiarity of retail supply business, the same has also been recognized by other SERCs. The Petitioner added that the amount, if any, written off towards bad debts is only adjusted against the accumulated provisions in the books, irrespective of the actual amount of bad debts written off during any particular financial year.

The Petitioner requested the Commission to allow provision for bad and doubtful debts on actual basis after considering the geographical spread of the large consumer base across the State including a large part of the same prevailing in the difficult terrain and hilly region and the problem of realizing energy dues from retail consumers.

The Petitioner further submitted that in line with the approach followed by the Commission in the previous Tariff Orders, the Petitioner has not included any amount on account of provisioning of bad debts in the ARR but has calculated the same and has requested the Commission for its approval.

The Petitioner further submitted that the amount of Rs. 59.28 Crore has been written-off by the Petitioner during FY 2018-19.

As regards the bad and doubtful debts, the Commission sought consumer category wise bad debt written off from the Petitioner. UPCL in response submitted the category wise bad debts written off during FY 2018-19 as follows:

Table 3.39: Category wise Bad Debt written off as submitted by the Petitioner (Rs. Crore)

Category	Amount (Rs. Crore)
Domestic	21.62
Non-domestic	7.97
PTW	3.70
LT Industry	11.55
HT Industry	11.48
Public Lamps	0.20
Public Water works	1.36
Supply in Bulk Extra State Consumers	0.53
Total	**59.28**

The Commission has gone through the submissions of the Petitioner. It is observed from the submissions made by the Petitioner time and again that the bad debt pertains to write off of fictitious arrears which were created due to wrong or excess billings. In this regard, the Commisison has been continuously directing UPCL to refrain itself from treating rectification of wrong billing made in the earlier period as writing off the bad debts. **The Commission again directs the Petitioner to account its billing adjustment and writing off the bad debts properly in accordance with the accounting policies. UPCL is also directed to submit the consumer wise details of bad debts written off within one month from the end of each quarter.**

The Commission in its previous Tariff Order dated March 21, 2018 had held as under:

"The Commission in the previous Tariff Order had directed the Petitioner to carry out an audit of receivables and also identify and classify the same. Though the Petitioner has submitted a draft bad debt policy, however, the same needs to be supported by audit report of receivables. The Commission as of now has not considered the provision for bad and doubtful debts in the approval of ARR for FY

2018-19 in accordance with the UERC Tariff Regulations, 2015. Further, the Commission is not approving the draft bad debt policy submitted by the Petitioner in these proceedings and will take a view on the same separately. The Commission, therefore, directs the Petitioner to submit the audit report of receivables identifying and classifying the same in detail within 6 months from the date of this Order. The Commission shall consider writing off of bad debts for FY 2018-19 upon submission of the same at the time of truing up of FY 2018-19."

The Petitioner during the tariff proceedings of Truing up of FY 2017-18 has submitted a Draft Bad Debt Policy. The Commission in its Order dated February 27, 2019 with regards to the Policy held as follows:

"The Petitioner has not submitted the copy of its Draft Bad Debt Policy in the manner required by the Commission. Further, audit report of receivables identifying and classifying the same in detail has also not been submitted till date.

The Table below shows the ageing schedule of receivables with UPCL as on 31.03.2018.

Table 4.39: Ageing schedule of receivables with UPCL as on 31.03.2018 (Rs. Crore)

Consumer Category	Receivables with age							
	< 6 months	6 months to 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	> 5 years	Total
Domestic	26.13	39.19	54.92	38.44	53.52	21.86	311.54	**545.61**
Non-Domestic	3.92	5.88	18.79	22.47	34.43	29.38	180.89	**295.76**
LT Industry	1.64	2.45	6.66	1.73	0.91	0.68	29.49	**43.55**
HT Industry	3.25	4.88	12.22	24.08	84.19	2.35	221.46	**352.45**
Mixed Load	0.18	0.28	0.90	1.51	0.63	1.52	(4.04)	**0.98**
Private Tube-wells	8.15	12.23	15.82	12.17	23.21	8.78	65.65	**146.00**
Public Lamps	16.75	25.13	(0.00)	1.99	0.02	2.85	(16.79)	**29.95**
Public Water Works	10.11	15.17	1.33	(1.26)	21.78	3.75	74.48	**125.36**
Govt. Irrigation System	13.16	19.74	(23.74)	42.25	21.30	12.85	(2.59)	**82.96**
Railway Traction	0.61	0.92	(0.00)	(0.00)	0.04	(0.00)	(1.57)	**0.00**
Total	**83.31**	**124.96**	**86.89**	**143.37**	**239.99**	**84.01**	**860.09**	**1,622.62**

It is not clear as to without identifying the debtors, how the ageing schedule has been prepared. This is evident from the negative receivables reflecting in the ageing schedule of Mixed load category (with ageing greater than 5 years), Public Lamps (age over 5 years), Public water works (age between 2 to 3 years), GIS (age between 1 to 2 years and over 5 years) and Railway Traction which is a single consumer has a negative receivable having age over 5 years. It is incomprehensible as to how the receivables can be negative, the same can only be in one situation that the consumers may have paid more than what was due from it which is not imaginable. Moreover, the receivables having age more than 5 years are to the tune of Rs. 860 Crore, i.e. more than 50% of the total arrears as on 31.03.2018, in which industries accounts for about 29% dues. This reflects *towards the callous attitude of UPCL in realising its arrears from such categories where monthly billing is being done and which are not in large numbers.* ***Accordingly, the Commission directs UPCL to submit the list of industries (both LT & HT) on whom the arrears are due having age more than 5 years within 6 months of the date of the Order. UPCL is also directed to reconcile the dues pending with railways within 6 months of the date of the Order and submit the compliance before the Commission. UPCL is also directed to raise the issue of pending dues on Government connections like Public Lamps, Public Water Works and GIS and settle the dues before the end of FY 2019-20.***

Hence, in the absence of firm compliance by UPCL with respect to the directions given by the Commission, the Commission has not allowed any provision for Bad Debts for FY 2017-18."

The Petitioner during the current proceedings in its compliance to the above directions submitted that it had invited tender for ***"Engagement of Consutants to carry out audit of receivables for Sale of power"*** for all the 41 divisions of UPCL. The Petitioner further submitted that only two CA firms participated in the same out of which one was awarded the work. However, due to the selected firm backing out expressing its inability to perform the task the tender was scrapped. Further, the Petitioner submitted that the matter was discussed in the Audit Committee on June 19, 2019 which directed to carry out the audit internally for five divisions with largest receivables. The Petitioner submitted that it again invited tender for the above task and the work has been awarded on February 06, 2019 which was supposed to be completed within three months. The Commission is yet to recieve the report of the same.

The Petitioner with regards to reconciliation of dues submitted that it has directed its field officers to provide the information. The Commission is however, yet to be receive the said information. The Petitioner also submitted Bad Debt Policy for approval of the Commission.

The Commission has gone through the submissions of the Petitioner and observes that the Petitioner has not complied with the directions of the Commission with regards to the audit of the receivables and reconciliation of consumer wise dues. The Commission has, therefore, at this stage not gone into the merits of the Bad Debt Policy submitted and **directs the Petitioner to submit all requisite information as directed in its Order dated February 27, 2019 withing six months from the date of this Order.**

3.2.4 *Interest on Working Capital (IoWC)*

The Petitioner has submitted that it has computed interest on working capital as per UERC

Tariff Regulations, 2015. However, as per the computation submitted by the Petitioner the net working capital works out to Rs. -61.71 Crore. The Petitioner submitted that it has not claimed any IoWC. The Petitioner also submitted that the actual interest on working capital is Rs. 41.02 Crore as the amount towards overdraft facility is primarily utilized for the purpose of availing the maximum rebate from the generators. Further, the Petitioner has submitted that since the normative interest on working capital is less than the actual working capital, the treatment of the same is to be allowed as per "Sharing of Gains and Losses" as per UERC Tariff Regulations.

The computation of interest on working capital as submitted by the Petitioner is detailed in the Table below:

Table 3.40: Interest on Working Capital for FY 2018-19 (Rs. Crore)

Particulars	Amount
Operation and Maintenance Expenses (one month)	43.17
Maintenance Spares @ 15% of O&M Expenses	77.70
Receivables (2 months)	1056.22
Capital required to finance such shortfall in collection of current dues	63.37
Sub-total	**1240.46**
Less: Adjustment for security deposits & Credit available for Power Purchase	1302.18
Net working capital	-61.71
Interest on working capital	**0.00**

Similar to the Petitioner's submission, the net working capital as worked out based on the approved expenses is negative, therefore, the Commission is not approving any IoWC for FY 2018-19.

The Petitioner's submission that the amount towards overdraft facility has been primarily utilized for the purpose of availing the maximum rebate from the generators *prima facie* appears to be incorrect. The Petitioner in its Petition mentioned that it had paid late payment surcharge (LPS) of Rs. 2.54 Crore to the generating companies. In another submission, it mentioned that it had earned a rebate of Rs. 5.96 Crore from making timely payments to the generators, however, the interest on overdraft paid by UPCL has exceeded the benefits derived out of the rebate earned which was not a viable proposition. Hence, it is amply clear that the payments are not being made to the generators in time leading to payment of LPS. This is also evident from the audited annual accounts of the Petitioner from which it is clear that the power purchase dues have increased from Rs. 2259.91 Crore in FY 2017-18 to Rs. 3,143.41 Crore in FY 2018-19. Thus, the Petitioner's submissions that the overdraft facility has been availed to make payments to the generators is incorrect and misleading.

From the monthly commercial statements of the Petitioner, it may be deduced that poor collection efficiencies of the Petitioner may also be a reason for availing overdrafts. This is evident from the Table below:

Table 3.41: Monthwise position of Revenue Billed and Collected and interest paid on Overdraft and Rebate earned during FY 2018-19

Month	Revenue Billed (Rs. Crore)	Revenue Collected (Rs. Crore)	Collection efficiency (%)	Revenue Shortfall (Rs. Crore)	Monthly OD Availed (Rs. Crore)	Interest on OD (Rs. Crore)	Rebate Earned (Rs. Crore)
Apr-18	512.19	256.67	50.11%	255.52	525.19	2.26	0.11
May-18	1,032.20	679.11	65.79%	353.09	570.08	2.91	1.43
Jun-18	1,591.42	1,139.81	71.62%	451.61	554.54	3.19	0.5
Jul-18	2,183.21	1,645.17	75.36%	538.03	637.02	3.22	1.07
Aug-18	2,742.57	2,145.63	78.23%	596.94	648.63	3.48	0.34
Sep-18	3,324.08	2,663.78	80.14%	660.30	641.69	3.28	0.59
Oct-18	3,882.29	3,181.98	81.96%	700.31	605.65	3.25	0.37
Nov-18	4,424.89	3,690.30	83.40%	734.59	626.9	3.24	0.47
Dec-18	4,952.04	4,206.88	84.95%	745.16	604.65	3.71	0.46
Jan-19	5,505.57	4,730.49	85.92%	775.09	716.47	3.52	0.23
Feb-19	6,036.06	5,293.95	87.71%	742.11	701.69	4.34	0.16
Mar-19	6,544.24	6,216.52	94.99%	327.71	790.35	4.62	0.23
Total						**41.02**	**5.96**

Thus, the above Table reveals that against the approved collection efficiency of 99% for FY 2018-19, the actual collection efficiency of the current dues of the Petitioner has been less than 80% till September, 2018 (FY 2018-19) which primarily has necessitated the requirement of availing overdrafts as in September the shortfall in collection has been Rs. 660.30 Crore against which an OD has been availed of about Rs. 641.69 Crore. It is also dismal to point out that the collection efficiency during April was only 50% and in May was about 66% and less than 80% till August, 2019. From the same it appears that a non-commercial sense has prevailed in the Petitioner's system and such malpractice to delay the collection efforts towards the second half of the Financial year and sit upon the same during the first half is highly reprehensible for a retail company in today's technology driven receivable management system. The Commission expresses its anguish over the same as it not only is affecting the financial position of UPCL adversely but in turn is making other utilities also suffer due to the delay on the part of UPCL in making payments to them. Besides this, it is also imposing an additional burden on UPCL towards the cost of interest on overdrafts. The endeavour of the field officers should be to collect 99% of their dues each month and not to wait for the second half of the financial year to focus on collections. **Therefore, the Commission directs UPCL to submit the month wise division wise details of collection of dues by the 15th of the next month and action under the Act may be taken against the Executive Engineer of those divisions who are found in default of making collections less than the approved collection efficiency.**

However, for the current proceedings, actual interest on overdraft facility availed, which is an avoidable working capital facility availed by the Petitioner, has been considered as a loss and sharing of the same has been done in accordance with UERC MYT Regulations, 2015.

3.2.5 *Return on Equity*

The Petitioner submitted that it has computed Return on Equity (RoE) for FY 2018-19 based on the actual equity invested in the business as per Regulation 26 of the UERC Tariff Regulations, 2015. The Petitioner further submitted that it has calculated RoE on the basis of the following:

- Revised closing equity for FY 2017-18 has been considered including the net capitalisation disapproved on account of Electrical Inspector Certificate.

Table 3.42: Opening and closing equity for FY 2018-19 as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19
Opening Equity	**591.51**
Addition	**110.30**
Closing Equity	**701.81**

- The capitalisation for FY 2018-19 excluding the grants and deposit works has been considered to be funded in the debt equity ratio of 70:30.
- Return on equity has been computed on the average equity at the rate of 16.50%.

The Commission directed the Petitioner to submit the documentary evidence of equity infused. The Petitioner in its reply submitted the same.

The Commission has considered the closing equity approved for FY 2017-18 as the opening equity for FY 2018-19. Accordingly, the Commission has approved the Return on Equity at the rate of 16.50% on the opening equity in accordance with the Regulations. The Return on Equity approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 3.43: Return on Equity approved by the Commission for FY 2018-19 (Rs. Crore)

Particulars	Approved in the Tariff Order	Claimed by UPCL	Approved
Return on Equity	78.24	106.70	85.76

3.2.6 *Non-Tariff Income*

The Petitioner submitted that the Non-Tariff Income includes income from non-tariff sources such as income from investments, delayed payment surcharge, etc. The Petitioner, in its Petition, has claimed non-tariff income as Rs. 244.41 Crore as against the actual Non-Tariff Income, as per the audited accounts, of Rs. 257.52 Crore.

The Petitioner with regard to material cost variance submitted that out of the total Rs. 21.57 Crore, contribution from grants (Rs. 13.11 Crore) has been deducted from the overall claim in line with the methodology adopted by the Commission in the previous Tariff Orders. The Petitioner further submitted that it has considered the wheeling charges and cross subsidy surcharge as part of revenue from sale of power and has not considered the same as non-tariff income.

The Commission agrees with the submissions made by the Petitioner with regard to the material cost variance on the value of grants.

Accordingly, the non-tariff income claimed by the Petitioner and that approved by the Commission for the purpose of truing up for FY 2018-19 is as given in the Table below:

Table 3.44: Non-tariff Income approved by the Commission for FY 2018-19 (Rs. Crore)

Particulars	Approved in the Tariff Order	Claimed by UPCL	Approved
Interest on deposits	155.26	57.41	57.41
Income from staff welfare activities		0.17	0.17
Rebate/Incentive		6.00	6.00
Miscellaneous receipts		7.37	7.37
Material Cost Variance		8.46	8.46
Delayed Payment Surcharge		165.00	165.00
Total	**155.26**	**244.41**	**244.41**

3.3 Tariff Revenue

The Petitioner submitted the revenue at existing tariff as Rs. 6218.61 Crore as against the revenue of Rs. 6013.19 Crore approved by the Commission in the Tariff Order for FY 2018-19.

The Petitioner further submitted that even after making significant improvements, the actual distribution loss for FY 2018-19 were lower than the baseline value of 14.50% approved by the Commission for FY 2018-19. The Petitioner further submitted the gain to be allowed to it on account of the same which is as shown in the Table below:

Table 3.45: Additional Revenue from Sale for FY 2018-19 (Rs. Crore)

S. No.	Particulars	Actuals
1.	Actual Sales (MU)	11826.68
2.	Approved Distribution Loss Level (%)	14.50%
3.	Actual Energy Input at T-D Interface (MU)	13803.71
4.	Sales at Actual Energy Input with 14.50% Loss (MU)	11802.18
5.	Gain of Sales (MU)	24.51
6.	Revenue at Existing Tariff (Rs. Crore)	6211.19
7.	ABR (Rs./kWh)	5.25
8.	Additional Revenue due to higher distribution losses (Rs. Crore)	12.87
9.	**Gain to be retained by the Petitioner (2/3 of 8) (Rs. Crore)**	**8.58**

The Commission has considered the distribution loss for FY 2018-19 as approved by it in its MYT Order and, accordingly, has computed the loss of sales as 111.87 MU due to commercial inefficiencies of UPCL.

While approving the category wise sales for FY 2018-19, the Commission has recasted the sales of all the categories of consumers except railways, from the sales submitted by the Petitioner. Since, the sale has been reduced, the ABR for other Domestic Consumer Category has increased to Rs. 3.91/kWh from the earlier Rs. 3.87/kWh. As against the same it is observed that the ABR corresponding to Departmental Employees of UPCL, UJVN Ltd. and PTCUL as submitted by the Petitioner is Rs. 2.99/kWh. The Commission has, accordingly, adjusted the revenue on account of difference in the ABR of Departmental employees based on the ABR of other domestic consumers.

The revenue corresponding to the assessed sale is shown in the Table below:

Table 3.46: Revenue for FY 2018-19 from Departmental Employees Corresponding to Assessed Sales

Particulars	Sales (MU)	Actual Revenue (Rs. Crore)	Actual ABR of deptt employee (Rs./kWh)	Actual ABR of other domestic consumers after re-casted sales (Rs./kWh)	Additional Revenue from departmental employees (Rs. Crore)
	(i)	(ii)	(iii)	(iv)	(v)=(i x iv) – (ii)
UPCL Employees and Pensioners	20.56	5.34	2.60	3.91	2.71
PTCUL Employees and Pensioners	2.81	0.94	3.33	3.91	0.16
UJVNL Employees and Pensioners	6.42	2.63	4.10	3.91	0.00
Total					**2.87**

It is imperative to mention that in accordance with the Commission's approach in the previous Tariff Orders, the impact of concessional/subsidised electricity provided by UPCL to its employees has to be borne by UPCL as the average consumption of the employees is much higher than the consumption of other domestic consumers and, moreover, the charges which are recovered from the employees towards the use of electricity is not commensurate with the price charged from other domestic consumers. Hence, the same cannot be allowed to be passed on to the consumers in the State and the Corporation will have to bear this burden.

The Commission further observes that the Petitioner has considered revenue of Rs. 295.95 Crore in FY 2018-19 even though actual recovery was allowed in FY 2019-20. The Commission while considering the revenue at existing tariff has not considered this revenue in tariff revenue, but had adjusted the same separately as the additonal power purchase cost incurred in FY 2018-19 of Rs. 295.95 Crore which has been allowed to be recovered only in FY 2019-20 so as to avoid double loading of the costs to the consumers as the same is included in the total power purchase costs trued up for FY 2018-19

Based on the above, the revenue from the sale of power, as worked out by the Commission is shown in the Table below:

Table 3.47: Revenue from Sale of Power for FY 2018-19 (Rs. Crore)

Particulars	Amount
Actual Revenue	5915.24
Add: Revenue corresponding to recasted Sales	2.87
Total Revenue	**5918.11**

The Commission for the computation of ABR has considered an amount of Rs. 5918.11 Crore.

Further, as discussed above there is a loss of 111.87 MU on account of commercial inefficiencies of the Petitioner failing to achieve target distribution loss approved by the Commission. The Commission has considered the revenue of Rs. 56.63 Crore at an average billing rate of Rs. 5.06 kWh for this additional loss of sale on account of higher distribution losses while truing up the ARR for FY 2018-19 as shown in the Table below:

Table 3.48: Additional Revenue from Sale due to inefficiency for FY 2018-19 (Rs. Crore)

S. No.	Particulars	Claimed by UPCL	Approved
1.	Actual/ Re-casted Sales (MU)	NIL	11690.30
2.	Approved Distribution Loss Level (%)		14.50%
3.	Actual Energy Input at T-D Interface (MU)		13803.71
4.	Sales at Actual Energy Input with 14.75% Loss (MU)		11802.18
5.	Loss of Sales due to Inefficiency (MU)		111.87
6.	Revenue at existing Tariff (Rs. Crore)		5918.11
7.	ABR (Rs./kWh)		5.06
8.	Additional Revenue due to higher distribution losses (Rs. Crore)		56.63
9.	Losses to borne by Petitioner (2/3rd of 8) (Rs. Crore)		**37.76**

Accordingly, the Commission has considered tariff revenue of Rs. 5955.87 Crore including Rs. 37.76 Crore as deemed revenue on account of excess loss for FY 2018-19 as against total revenue of Rs. 6211.19 Crore claimed by the Petitioner.

3.4 Sharing of Gains and Losses

The Petitioner submitted that it has achieved better performance against the targets specified on the performance parameters, i.e. employee expenses and A&G expenses.

The sharing of gains and losses claimed by the Petitioner for FY 2018-19 is as shown in the Table below:

Table 3.49: Sharing of Gains and Losses for FY 2018-19 claimed by the Petitioner (Rs. Crore)

Particulars	Amount (Gain/(Loss)	Consumer Share	UPCL Share
Gain		1/3rd	2/3rd
Employee Expenses	(8.69)	(2.90)	(5.79)
IoWC	(41.02)	(13.67)	(27.35)
Distribution Loss	12.87	4.29	8.58
(Loss)/ Gain Share	**(36.84)**	**(12.28)**	**(24.56)**

Regulation 12 of the UERC Tariff Regulations, 2015 specifies as under:

"12. Annual Performance Review

…

(5) The "uncontrollable factors" shall include such of the factors which are beyond the control of, the applicant, as determined by the Commission. Some examples of uncontrollable factors are as follows:

…

c) Economy wide influences such as unforeseen changes in inflation rate, market interest rates, taxes and statutory levies;

…

(6) Some illustrative variations or expected variations in the performance of the applicant which may be attributed by the Commission to controllable factors shall include, but shall not be limited to, the following:

…

f) Variations in working capital requirements;

…

j) Variation in operation & maintenance expenses

…

(10) Upon completion of the Annual Performance Review, the Commission shall pass on an order recording-

a) The approved aggregate gain or loss to the Applicant on account of uncontrollable factors and the mechanism by which the Applicant shall be allowed such gains or losses in accordance with Regulation 13;

b) The approved aggregate gain or loss to the Applicant on account of controllable factors and sharing of such gains or such losses that may be shared in accordance with Regulation 14;

c) The approved modifications to the forecast of the Applicant for the ensuing year, if any;

The surplus/deficit determined by the Commission in accordance with these Regulations on account of truing up of the ARR of the Applicant shall be carried forward to the ensuing financial year."

Regulation 13 of the UERC Tariff Regulations, 2015 specifies as under:

"13. Sharing of Gains and Losses on account of Uncontrollable factors

(1) The approved aggregate gain or loss to the Applicant on account of uncontrollable factors shall be allowed as an adjustment in the tariff/charges of the Applicant over such period as may be

specified in the Order of the Commission;

…"

Regulation 14 of the UERC Tariff Regulations, 2015 specifies as under:

"14. Sharing of Gains and Losses on account of Controllable factors

(1) The approved aggregate gain and loss to the Applicant on account of controllable factors shall be dealt with in the following manner:

a) 1/3rd of such gain shall be passed on as a rebate or allowed to be recovered in tariff over such period as may be specified in the Order of the Commission;

b) The balance amount of gain may be utilized or absorbed by the Applicant."

Hence, in accordance with UERC Tariff Regulations, 2015, the O&M expenses, IoWC and Distribution losses are controllable factors and any gain or loss on account of the controllable factors is to be dealt in accordance with the provisions of Regulation 14 of the above mentioned Regulations.

The sharing of gains on account of controllable factors approved by the Commission for FY 2018-19 is as shown in the Table given below:

Table 3.50: Sharing of Gains on Account of Controllable Factors approved by the Commission for FY 2018-19 (Rs. Crore)

Particulars	Actual for truing up	Normative as Trued up	Aggregate gain/(loss)	Consumer's Share	Petitioner's Share of Gain/(Loss)
	A	B	C=B-A	(Gain): D=1/3 x C Loss D=1/3 x C	E=C-D
O&M expenses	524.80	483.16	(41.64)	(13.88)	(27.76)
Distribution Loss	15.31%	14.50%	(56.63)	(18.88)	(37.76)
IoWC	41.02	0.00	(41.02)	(13.67)	(27.35)
Total			**(139.29)**	**(46.43)**	**(92.86)**

3.5 ARR and Revenue for FY 2018-19

The Commission in its Tariff Order dated March 21, 2018 had approved the Net Revenue Requirement for FY 2018-19 as Rs. 5997.50 Crore. The Petitioner has now claimed an ARR of Rs. 6337.32 Crore for FY 2018-19. However, based on the various elements of the ARR as discussed above and approved by the Commission, the summary of final Truing up for FY 2018-19 is given in the Table below:

Table 3.51: Summary of true up for FY 2018-19 approved by the Commission (Rs. Crore)

S. No.	Particulars	Tariff Order	Claimed by UPCL	Approved
1.	Total Power Purchase Cost including Transmission Charges	5429.07	5772.05	5672.23
2.	Interest on Loan & Financing Charges	138.47	144.02	122.15
3.	Depreciation	142.42	122.60	138.82
4.	O&M expenses after sharing of gains and losses	505.57	520.92	497.04
5.	Interest on Working Capital	-	-	-
6.	Impact of IoWC sharing	-	13.67	13.67
7.	Return on Equity	78.24	106.70	85.76
8.	Impact of Previous Year Funding adj.			-
9.	**Aggregate Revenue Requirement**	**6246.69**	**6679.97**	**6529.67**
10.	Less: Non-Tariff Income	155.26	244.41	244.41
11.	Gap/(Surplus) of previous year	64.78	64.78	64.78
12.	Past Year Adjustment	-158.71	-158.71	-158.71
13.	**Net ARR**	**5997.50**	**6341.62**	**6191.33**
14.	**Revenue**			
15.	Revenue at Existing Tariff	5859.95	5915.24	5918.11
16.	Revenue from Addl. Sales. (after sharing)		4.29	37.76
17.	**Total Revenue**	**5859.95**	**5919.53**	**5955.87**
18.	Less: Other Adjustment (Power Purchase cost of FY 2018-19 allowed to be recovered in FY 2019-20)		295.95	295.95
19.	**Adjusted Revenue (Surplus)/Gap (13-17-18)**	**137.55**	**126.14**	**(60.49)**

The Commission while calculating the surplus/gap with respect to the revenue at existing tariff has adjusted the additonal power purchase cost incurred in FY 2018-19 of Rs. 295.95 Crore which has been allowed to be recovered in FY 2019-20 so as to avoid double loading of the costs to the consumers as the same is included in the power purchase costs trued up for FY 2018-19.

The Petitioner in its Petition had requested the Commission to approve the gap of Rs. 126.14 Crore. However, the Commission has approved a surplus of Rs. 60.49 Crore for FY 2018-19. The Commission while computing the carrying cost has considered the impact of delayed recovery of additonal power purchase cost incurred in FY 2018-19 by the Petitioner pertaining to FY 2018-19 which was allowed to be recovered only in FY 2019-20 and, hence, the same is eligible for carrying costs. The surplus for FY 2018-19 with carrying cost and above adjustment of delayed recovery works out to Rs. 30.16 Crore which has been considered by the Commission in the ARR of FY 2020-21.

4. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2019-20 and ARR for FY 2020-21

4.1 Background

As regard the MYT Framework and determination of ARR, UERC Tariff Regulations, 2018 specifies as follows:

*"**4. Multi-year Framework***

The Multiyear tariff framework shall be based on the following:-

a) Business plan submitted by the applicant for the entire control period for the approval of the Commission prior to the beginning of the control period;

b) Applicant's forecast of expected ARR for each year of the control period, based on reasonable assumptions and financial & operational principles/parameters laid down under these Regulations submitted alongwith the MYT petition for determination of Aggregate Revenue Requirement and Tariffs for first year of the control period;

c) Review of control period ending on 31.03.2019 shall also be taken up alongwith the ARR/Tariff petition for the first year of ensuing control period.

d) Trajectory for specific parameters as may be stipulated by the Commission based on submissions made by the Licensee, actual performance data of the Applicants and performance achieved by similarly placed utilities;

e) Annual review of performance shall be conducted vis-à-vis the approved forecast and categorization of variations in performance into controllable factors and uncontrollable factors;

f) Sharing of excess profit or loss due to controllable and uncontrollable factors as per provisions of these Regulations.

…

7. Determination of Baseline

The baseline values (operating and cost parameters) for the base year of the control period shall be determined by the Commission and shall be based on the approved values by the Commission, the latest audited accounts, estimates for the relevant year, prudence check and other factors considered by the Commission. The Commission may re-determine the baseline *values for the base year based on the actual audited accounts of the base year."*

In accordance with the above provisions of the Regulations, the Commission had approved the Aggregate Revenue Requirement of the Petitioner for all the years of the Third Control Period, i.e. from FY 2019-20 to FY 2021-22 excluding the power purchase cost for FY 2020-21 and FY 2021-22 vide its MYT Order dated February 27, 2019.

As regards the Annual Performance Review, Regulations 12(3) of the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2018 specifies as follows:

"The scope of the Annual Performance Review shall be a comparison of the actual performance of the Applicant with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of following:

a) A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;

b) Categorisation of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (un-controllable factors).

c) Revision of estimates for the ensuing financial year, if required, based on audited financial results for the previous financial year;

d) Computation of the sharing of gains and losses on account of controllable factors for the previous year."

The Petitioner in the present APR Petition has requested the Commission to approve the revised estimates for FY 2020-21 based on the revised submissions in the APR Petition. The Commission had already approved most of the ARR components for the Third Control Period from FY 2019-20 to FY 2021-22 after detailed analysis, scrutiny and prudence check of the Petitioner's submission vide its MYT Order dated February 27, 2019. As the Commission had not approved the power purchase cost for FY 2020-21 in its MYT Order dated February 27, 2019, hence, in the present Order the Commission has approved the power purchase quantum and cost associated therewith based on the analysis and scrutiny of Petitioner's projections in the Petition and considering the subsequent submissions including actual audited data available for FY 2018-19. As discussed in the previous Chapter, the Commission in this Order has carried out the Truing up for FY 2018-19 in accordance with the UERC Tariff Regulations, 2015 wherein the Commission has allowed capitalisation of assets for FY 2016-17 to FY 2018-19. In accordance with Regulation 12(3) of the

UERC Tariff Regulations, 2018 the scope of annual performance review is limited to the revision of the estimates for the ensuing year, if required, based on the audited financial results for the previous year and give resultant effect on this account in the estimates of the said current year.

4.2 Sales

The Petitioner submitted that the State of Uttarakhand, is operating under an energy deficit scenario, i.e. the demand exceeds the supply of power. The Petitioner further submitted that the energy for retail supply depends on the availability of power in the State and the projection for the total energy available for sale is based on the total energy input from all Central and State Generating stations, as Uttarakhand is mainly dependent on Central and State-owned generation.

The Petitioner also submitted that based on the actual sales data, the energy consumption in the State has witnessed 5.46% Compounded Annual Growth Rate (CAGR) over the past six years, i.e. from FY 2013-14 to FY 2018-19 as shown in the Table below.

Table 4.1: Actual Energy Sales for consumer categories during FY 2013-14 to FY 2018-19 (MU)

S.No.	Consumer Category	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1.	RTS-1: Domestic	2106.20	2274.01	2391.15	2486.15	2741.53	2849.20
2.	RTS-2: Non-Domestic	995.76	1069.93	1121.03	1178.02	1235.23	1301.34
3.	RTS -3: Govt. Public Utilities	441.66	471.12	533.45	551.52	590.25	614.66
4.	RTS-4: Private Tube-wells/Pumping sets	239.75	298.45	331.98	350.49	271.37	190.13
5.	RTS-5: LT &HT Industry						
	LT Industry	287.66	304.79	282.32	300.13	302.21	309.93
	HT Industry	4804.91	5066.49	5437.27	5508.03	5858.07	6355.76
6.	RTS-6: Mixed Load	177.60	185.68	186.78	178.11	182.43	177.75
7.	RTS-7: Railway Traction	11.49	14.70	14.16	19.23	27.73	27.91
	Total	**9065.02**	**9685.16**	**10298.14**	**10571.69**	**11208.82**	**11826.68**

The Petitioner submitted that the year-on-year growth in sales have remained around 5.50% for each year except for FY 2016-17 where the growth has been less than 2.70% which was on account of various external reasons. However, during FY 2018-19 the State witnessed revived growth at the rate of 5.51%. The Petitioner, therefore, submitted that for the purpose of projection of sales for FY 2020-21 it has considered a mix of long to medium term trend in energy consumption along with adjustments on account of past abnormalities and impact of recent developments and economic conditions that would have a bearing on the future consumption in select consumer categories. The Petitioner further submitted that it has considered the Adjusted Trend Analysis

Method in line with the approach followed by the Commission in the past and has projected sales for FY 2020-21 by escalating actual sales of FY 2018-19.

Projection of Energy Sales – Adjusted Trend Analysis (CAGR) Method

The Petitioner submitted that for projecting the category-wise energy sales, it has considered past growth trends in each consumer category, as explained below:

a) The Petitioner has adopted an Adjusted Trend Analysis Method for projecting the sales for all consumer categories. The Petitioner submitted that this method assumes that the underlying factors which drive the demand for electricity are expected to follow the same trend as in the past, however, this approach also discounts any outlier (relative to the trend) observed in the growth rates over the period of 5 years and excludes them while projecting energy sales for FY 2017-18.

b) The Petitioner submitted that this method makes use of a statistical tool, namely the Compound Annual Growth Rate (CAGR) and, accordingly, Compound Annual Growth Rates (CAGRs) were calculated from the past figures for each category, corresponding to different lengths of time in the past six years, along with the year on year growth rates from FY 2013-14 to FY 2018-19. Further, factors such as seasonality effect on consumption, current economic conditions and enhancement of connected load has been considered while considering the growth rate for projections.

c) CAGR has been computed for each consumer category for the past 6-year period, i.e. 5 year CAGR from FY 2013-14 to FY 2018-19, the 4-year CAGR from FY 2014-15 to FY 2018-19, the 3-year CAGR from FY 2015-16 to FY 2018-19, and the 2-year CAGR from FY 2016-17 to FY 2018-19, along with the 1-year growth rate of FY 2018-19 over FY 2017-18, as summarised in the Table below:

Table 4.2: CAGR calculated for Energy Sales to each consumer category

S. No.	Consumer Category	5 year	4 year	3 year	2 year	1 year
1.	RTS-1: Domestic	6.23%	5.80%	6.02%	7.05%	3.93%
2.	RTS-2: Non-Domestic	5.50%	5.02%	5.10%	5.10%	5.35%
3.	RTS-3: Govt. Public Utilities - Public Lamps	2.22%	1.22%	2.71%	0.78%	-14.22%
4.	RTS-4: Private Tube-wells / Pumping sets	-5.59%	-11.90%	-18.43%	-28.28%	-32.24%
4A.	RTS-4A: Agriculture Allied Services	0.00%	0.00%	141.34%	233.35%	71.34%
5.	RTS-3: Govt. Public Utilities - Government Irrigation System	8.18%	9.44%	3.07%	3.17%	-6.81%
6.	RTS-3: Govt. Public Utilities - Public Water Works	6.98%	6.74%	5.81%	7.15%	11.94%
7.	RTS-5: LT & HT Industry					
8.	*Total LT*	1.50%	0.42%	3.16%	1.62%	2.55%
9.	*Total HT*	5.75%	5.83%	5.34%	7.42%	8.50%
10.	RTS-6: Mixed Load	0.02%	-1.09%	-1.64%	-0.10%	-2.57%
11.	RTS-7: Railway Traction	19.43%	17.39%	25.37%	20.48%	0.66%
	Total	**5.46%**	**5.12%**	**4.72%**	**5.77%**	**5.51%**

The Petititioner stipulated the methodology for projecting the category wise sales for FY 2020-21 as given below:

(i) **RTS-1: Domestic:** The Petitioner submitted that the sales growth during FY 2018-19 in domestic category was 3.93%. Further, accounting for economic slowdown, reduction in consumption etc. the Petitioner opted for a conservative growth rate and has considered the growth rate similar to that of latest year

(ii) **RTS-2: Non-Domestic:** The Petitioner submitted that the sales growth has been range bound (5-6%) as per the CAGR computed for various time intervals. Therefore, the sales for RTS-2 Non-Domestic category has been projected based on a 4 year CAGR of 5.02%.

(iii) **RTS-3: Government Public Utilities:** The Petitioner submitted that the Commission had merged three categories of public lamps, govt. irrigation system and public water works to create a single new category of Govt. Public Utilities. The Petitioner submitted that it has independently analyzed the growth rates for each of these categories in the past years. The Petitioner has considered a 5 year CAGR rate for Govt Public Utilities and 3 year CAGR for GIS and PWW category.

(iv) **RTS 4: Private Tube Wells/Pumpsets (including RTS-4A):** The Petitioner submitted that on an overall basis (RTS 4 and RTS 4A), there has been a decline in the consumption of this category in the last 3 years. The actual consumption has also remained range bound in this category. Therefore, the Petitioner has considered a nominal increase of 2.00%.

(v) **RTS-5: LT & HT Industries:** The Petitioner submitted that for LT industry the 3 to 5 year growth in sales is minimal. Further in the first quarter of FY 2019-20 the q-o-q growth has been observed at 11.60%. With regards to HT Industries, the Petitioner submitted that the growth in sales during FY 2018-19 was 8.50%. However, the growth observed in the 1st quarter of FY 2019-20 has been subdued at 2.16%. The Petitioner has considered a conservative growth rate of 2.16%, as observed in the recent quarter, for both LT & HT category owing to factors such as economic slowdown, open access etc.

(vi) **RTS-6: Mixed Load Consumers:** The Petitioner has projected the sales of mixed load consumers to grow a at nominal rate of 2.00% owing to decline in sales in FY 2018-19.

(vii) **RTS 7: Railways:** The Petitioner has considered conservative growth rate of 2% due to anomalies observed in the trends of growth rate in the past years.

The Petitioner has considered the base year as FY 2018-19 for projecting the sales for FY 2020-21. The Petitioner has, accordingly, projected the energy sales for FY 2020-21 as shown in the Table below:

Table 4.3: Sales projected by the Petitoner for FY 2020-21 (MU)

S. No.	Category Wise Sales	FY 2018-19	Growth Rate	Method Adopted	FY 2020-21
1.	RTS-1: Domestic	2849.20	3.93%	Year-On-Year	3077.39
2.	RTS-2: Non-Domestic	1301.34	5.02%	4 Year CAGR	1435.19
3.	RTS-3: Govt. Public Utilities - Public Lamps	49.16	2.22%	5 Year CAGR	51.37
4.	RTS-4: Private Tube-wells / Pumping sets	179.79	2.00%	Nominal Growth	187.05
4A.	RTS-4A: Agriculture Allied Services	10.35	2.00%	Nominal Growth	10.76
5.	RTS-3: Govt. Public Utilities - Government Irrigation System	154.42	3.07%	3 Year CAGR	164.05
6.	RTS-3: Govt. Public Utilities - Public Water Works	411.07	5.81%	3 Year CAGR	460.20
7.	RTS-5: LT & HT Industry				
8.	*Total LT*	309.93	2.16%	Same as HT Growth	323.46
9.	*Total HT*	6355.76	2.16%	1st Qtr – Y-o-Y	6633.26
10.	RTS-6: Mixed Load	177.75	2.00%	Nominal Growth	184.93
11.	RTS-7: Railway Traction	27.91	2.00%	Nominal Growth	29.04
	Total	**11826.68**			**12556.69**

The Commission has gone through the submissions of the Petitioner. The Commission observed that the sales of 12556.69 MU projected by the Petitioner is less than 13048.30 MU estimated by the Commission for FY 2020-21 primarily because of reduction in growth rates of domestic and PTW category.

As discussed in Chapter 3, the Commission has carried out the truing up of sales for FY 2018-19. Considering the actual re-casted sales as trued up sales for FY 2018-19, the Commission has re-worked the sales of FY 2020-21 as discussed below.

(i) Base year has been considered as FY 2018-19 as the actual sales data are available. The Commission has considered the re-casted sales for FY 2018-19 and has added the category wise load shedding carried out during FY 2018-19 as submitted by the Petitioner to derive the un-restricted sales for FY 2018-19.

(ii) The Commission has considered 4 Year CAGR of 4.99% for Domestic category as the same is close to the year on year growth rate of 3.93%.

(iii) Growth rate of RTS 2: Non-Domestic Cateogry has been considered as 5 Year CAGR of 4.42%.

(iv) Growth rate of RTS 3: Govt. Public Utilities: The Commission has considered 3 Year CAGR of 3.58% for the combined category which is similar to the Y-O-Y growth rate for FY 2018-19.

(v) Growth rate of RTS 4: PTW consumers, RTS 5: HT and LT Industrial Consumers, RTS 6 - Mixed Load and RTS 7 – Railway Traction: The Growth rates for these categories have been considered as projected by the Petitioner.

On the basis of the above, the total sales work out to 12539.66 MU which is lower than the sales of 13048.30 MU approved in the MYT Order dated February 27, 2019 by 508.64 MU. The Commission observes that there is a considerable difference in the sales approved in the MYT Order and that projected based on the re-casted sales of FY 2018-19. The Commission has, therefore, revised the sales considering the revised growth rates as discussed above for FY 2020-21 and the same is as shown below:

Table 4.4: Consumer Category wise sales approved by the Commission for FY 2020-21 (MU)

S.No.	Category	Claimed	Approved
1.	Domestic	3077.39	3123.11
2.	Non Domestic	1435.19	1413.40
3.	Public Utilities	675.62	643.24
4.	Private Tube Wells (PTW)	197.81	196.91
5.	Industrial Consumers		
	LT Industries	323.46	317.13
	HT Industries	6633.26	6633.04
	Total	**6956.72**	**6950.17**
6.	Mixed Load	184.93	183.55
7.	Railway Traction	29.04	29.27
	Grand Total	**12556.69**	**12539.66**

4.3 Distribution Loss Trajectory

The Commission has approved the Distribution Loss Trajectory for the third Control Period from FY 2019-20 to FY 2021-22 in the MYT Order dated February 27, 2019. The distribution loss trajectory approved by the Commission for the third Control Period from FY 2019-20 to FY 2021-22 is as shown in the Table given below:

Table 4.5: Distribution Loss Trajectory approved by the Commission for the third Control Period from FY 2019-20 to FY 2021-22

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed by UPCL	Approved	Claimed by UPCL	Approved	Claimed by UPCL	Approved
Distribution Losses	14.67%	14.25%	14.42%	14.00%	14.17%	13.75%

The Pettioner has proposed Distribution loss of 14.00% for FY 2020-21 as approved by the Commission in its MYT Order dated February 27, 2019.

The Commission approves the Distribution Loss for FY 2020-21 as approved in its MYT Order dated February 27, 2019. The Distrbution Loss as projected by the Petitioner and as approved by the Commission is as shown below:

Table 4.6: Distribution Losses approved for FY 2020-21

Particulars	Proposed	Approved
Distribution Losses	14.00%	14.00%

In line with the approach adopted by the Commission in its previous Tariff Orders, the Commission has considered the entire distribution loss reduction target for each year of the Control Period as reduction in commercial losses of the Petitioner and has, therefore, considered the impact of distribution loss reduction in terms of increase in sales due to efficiency improvement.

Accordingly, the estimated energy requirement at distribution periphery, State periphery and approved loss level for FY 2020-21 is given in the Table below:

Table 4.7: Energy Input requirement approved by the Commission for FY 2020-21

Particulars	Quantum
Distribution Sales (MU)	**12539.66**
Loss level for Energy Input (%)	14.25%
Energy Input required at T-D interface (MU)	14623.51
Commercial Loss reduction (%)	0.25%
Commercial Loss reduction (Additional sales due to efficiency improvement) (MU)	36.56
Total sales with efficiency improvement (MU)	12576.21
Overall Distribution Loss (%)	14.00%
PTCUL Loss (%)	1.40%
Energy Input at State periphery (MU)	14831.14

4.4 Aggregate Revenue Requirement

Regulation 69 of the UERC Tariff Regulations, 2018 specifies as follows:

"***69. Aggregate Revenue Requirement for each Financial Year of the Control Period***

(1) The total annual expenses and return on equity of the Distribution Licensee for each financial year of the Control Period shall be worked out on the basis of expenses and return allowed in terms of these Regulations.

(2) The retail supply tariff of a Distribution Licensee for each financial year of the Control Period shall provide for recovery of Aggregate Revenue Requirement of the Distribution Licensee for each financial year of the Control Period, as reduced by the amount of non-tariff income, income from wheeling in respect of open access customers, income from Other Business and receipts on account of cross-subsidy surcharge and additional surcharge for the relevant financial year, as approved by the Commission, and subsidy from the State Government for the financial year, if any, and shall comprise the following:

(a) Cost of power purchase;

(b) Transmission charges;

(c) System Operation Charges i.e. Fee and Charges paid to NLDC/RLDC/SLDC

(d) Interest and Finance charges on Loan Capital and on consumer security deposit;

(e) Depreciation, including and amortisation of intangible assets;

(f) Lease Charges

(g) Operation and Maintenance expenses;

(h) Interest on working capital; and

(i) Return on equity capital;

(j) Income-tax;

(k) Provision for Bad and doubtful debts

(3) Net Revenue Requirement from sale of electricity = Aggregate Revenue Requirement, as above, minus:

(a) Non-Tariff Income;

(b) Income from wheeling charges recovered from open access customers;

(c) Income from Other Business, to the extent specified in these Regulations;

(d) Receipts from cross-subsidy surcharge from open access consumers; and

(e) Receipts from additional surcharge on charges of wheeling from open access consumers.

(f) Any revenue subsidy or grant received from the State Government other than the subsidy under Section 65 of Electricity Act, 2003."

The Commission in this Order has determined the Net Revenue Requirement for FY 2020-21 as detailed in the subsequent Paras of this Chapter.

4.5 Power Purchase Cost

The Power requirement of UPCL is met from various sources which include the generating stations of:

- NTPC Ltd.

- NHPC Ltd.
- NPCIL
- SJVNL
- THDC Ltd.
- State generating stations of UJVN Ltd.
- UREDA
- Gas Generating Stations in the State
- Co-generation stations
- Independent Power Producers (IPPs)
- Other Renewable Sources
- Short-term power arrangements: Banking, open market purchase etc.

The Petitioner in its Petition submitted the source wise power purchase from various sources along with the cost of power purchase. For projecting the availability of power for FY 2020-21, the Petitioner has considered the average of the actual monthly energy generation during the past 3 years including FY 2018-19. The Petitioner further submitted that the same has been done to account for the seasonality effect of energy availability from different stations. Further, the normative auxiliary consumption and average allocation, i.e. firm share and unallocated share of last two years from each station has been considered by the Petitioner for projecting the availability to UPCL from Thermal Power Stations during FY 2020-21. The Petitioner further submitted that in case of aberration in generation from a generating station during any year or month due to non-functioning or maintenance, shut-down, etc., the same has been excluded for the purpose of projections. For the stations which have not been operational for complete 3 years, the average of the actual monthly generation during the years in which such stations have been fully operational has been considered. For new and upcoming stations, the Petitioner has considered Uttarakhand's expected entitlement from each station using the normative technical norms. Further, the Petitioner submitted that it has considered actual station wise Inter-State losses to estimate the energy availability at State Periphery. The energy availability from various sources has been projected by the Petitioner based on the following:

- **UJVN Ltd. –** For 10 LHPs and SHPs, the average of actual monthly energy generation during the past 3 years, i.e. FY 2016-17 to FY 2018-19 has been considered.

- **NTPC –** Monthly availability from NTPC stations of Singrauli, Unchahar- I, II & III, NCT Dadri II, Rihand STPS I, II & III, Kahalgaon-II and Jhajjar Aravalli based on the first 6-month actual data of FY 2019-20, normative auxiliary consumption and share of Uttarakhand from each station. For Gas Power Plants like Anta, Auraiya & Dadri and for Koldam Hydro station energy availability has been estimated based on average of actual month wise net generation of last 3 years, i.e. FY 2016-17 to FY 2018-19. For Koldam HPS, the energy availability for FY 2020-21 has been considered on the basis of average of actual monthly generation for the past two years from FY 2016-17 to FY 2018-19.

  Further, the share in monthly generation has been considered by considering the total allocation from each station to Uttarakhand.

- **NHPC –** For all stations except Kishanganga, the Petitioner has considered the average of actual monthly energy generation during the past 3 years from FY 2016-17 to FY 2018-19. The same has also been considered for projecting free power share from Dhauliganga, Tanakpur stations.

  For Kishanganga HEP, the Petitioner has considered the energy at Ex bus as actual generation of last year.

  Further, the share in monthly generation has been considered by considering the total allocation from each station to Uttarakhand.

- **NPCIL -** For NAPP and RAPP, the average of actual monthly generation during the past 3 years from FY 2016-17 to FY 2018-19 has been considered.

- **SJVNL -** For Nathpa Jhakri, the average of actual monthly generation during the past 3 years from FY 2016-17 to FY 2018-19 has been considered.

- **THDC -** For Tehri and Koteshwar, the average of actual monthly energy generation during the past 3 years from FY 2016-17 to FY 2018-19 has been considered. The same has also been considered for projecting free power share from these stations.

- **Vishnu Prayag HEP, GVK Srinagar and Rajwakti SHP -** The average of actual monthly energy generation during the past 3 years from FY 2016-17 to FY 2018-19 has been considered.

- **UREDA Stations and IPPs -** The Petitioner has estimated the monthly availability from UREDA and IPP stations (except for solar roof top, solar IPPs, Gama & Shravanti generators) based on previous three years' average of actual monthly generation, normative auxiliary consumption and share of Uttarakhand from each station. The availability from Gama and Shravanti Gas Plants, the Petitioner has considered last year's actual Ex-Bus generation. The availability from solar rooftop generators and Solar IPPs that have been commissioned recently has been estimated to be the same as actuals for last year.
- **Upcoming Stations -** The energy availability from stations expected to be commissioned by FY 2020-21 has been projected considering the likely COD of such generating stations from various sources such as CEA reports, PPA signed and as per the information made available by the generators. Power availability has been computed considering the same as that approved by the Commission in its MYT Order dated February 27, 2019. The Petititioner further submitted that it has not considered energy availability from Beta Station as the same has been delayed.
- **Transmission Losses -** The Petitioner has considered Inter-State Transmission Losses based on the average yearly losses for FY 2018-19. Intra-State transmission losses of 1.40% has been considered as approved by the Commission in its MYT Order dated February 27, 2019.
- **Deficit Power Purchase –** The Petitioner has proposed to procure energy in deficit months through open market.
- The Petitioner has proposed the total power purchase of 14808.12 MU in FY 2020-21.

The Commission has gone through the submissions of the Petitioner. The Commission for projection of power purchase for FY 2020-21 has considered the energy availability from various generating stations based on the three years month-wise energy availability from all the generating stations. Further, the Commission has computed the deficit/surplus quantum of power which the Petitioner would be required to purchase/bank depending on its requirement on the basis of monthly energy availability and estimated energy requirement. The Commission for projecting power purchase has considered existing generating stations as well as the upcoming generating stations likely to be commissioned by FY 2020-21 in which UPCL has firm allocation. The detailed approach for approving the power purchase quantum has been discussed below.

For projecting the energy availability quantum from various new sources, the Commission sought the following information from the Petitioner:

- Likely COD of the upcoming generating stations along with the sources on which the Petitioner has relied upon.
- Station wise POC Losses for projecting energy availability.

In reply, UPCL submitted the following:

- UPCL has considered the quantum of power from new stations as approved by the Commission in the MYT Order dated February 27, 2019. It further submitted CEA reports, news paper articles in support of assumed COD.
- UPCL further submitted station wise POC Losses based on 52 weeks average data of FY 2018-19.

The Commission while projecting the quantum of energy available from various sources for FY 2018-19 has made the following assumptions as detailed below.

4.5.1 *Power Purchase from UJVN Ltd.*

The Commission has considered the availability from generating stations of UJVN Ltd. as under:

Table 4.8: Power Purchase from UJVN Ltd.

Stations of UJVN Ltd.	Basis	Rationale
9 LHPs	Average of actual month wise gross generation in FY 2017-18, FY 2018-19 & FY 2019-20 (actual for 10 months, projections for 2 months); Further, impact of non-availability of one unit each in Dhakrani, Dhalipur and MB-I has been considered on account of RMU.	Three Year's average as per the Commission's earlier approach.
Maneri Bhali-II	Average of actual month wise gross generation in FY 2017-18, FY 2018-19 & FY 2019-20 (actual for 10 months, projections for 2 months);	
SHPs, viz. Pathri, Mohammadpur & Galogi	Average of actual month wise gross generation in FY 2017-18, FY 2018-19 & FY 2019-20 (actual for 10 months, projections for 2 months);	

The Commission has estimated the energy availability from these generating stations to UPCL at State periphery after considering the normative auxiliary consumption and excluding the share allocation to Himachal Pradesh. The summary of energy availability from UJVN Ltd. for FY 2018-19 as estimated by the Petitioner and the Commission is shown in the Table below:

Table 4.9: Summary of Energy Availability from UJVN Ltd. for FY 2020-21 (MU)

Particulars	Claimed	Approved
9 old LHPs	2710.85	2527.13
Maneri Bhali-II	1265.23	1291.56
Small Hydro		
Pathri	187.07	122.59
Mohammadpur		53.56
Galogi		6.80
Total	**4163.15**	**4001.64**

4.5.2 *Power Purchase from NHPC Ltd.*

The Commission has considered the availability from generating stations of NHPC Ltd. as under:

Table 4.10: Power Purchase from NHPC Ltd.

Stations of NHPC	Basis	Rationale
Salal	Average of actual month wise gross generation in FY 2017-18, FY 2018-19 & FY 2019-20 (actual for 10 months, projections for 2 months)	Three Year's Average as per the Commission's earlier approach
Chamera I		
Chamera II		
Chamera III		
Uri		
Dulhasti		
Sewa II		
Uri II		
Prabati III		
Tanakpur		
Dhauliganga		
Kishanganga	Average of actual month wise gross generation in FY 2018-19 & FY 2019-20 (actual for 10 months, projections for 2 months)	New Generating Station - Full year generation available for two years.

The Commission has estimated the energy availability from these generating stations to UPCL at State periphery after considering the normative auxiliary consumption, station wise POC losses approved by CERC for the Quarter January 2020 to March 2020 and considering the allocation to Uttarakhand. The summary of energy availability from NHPC Ltd. for FY 2020-21 as estimated by the Petitioner and the Commission is shown in the Table below:

Table 4.11: Energy Availability from NHPC Ltd. for FY 2020-21 (MU)

Station	Estimated by UPCL	Approved
Salal	36.88	40.89
Tanakpur	8.27	18.03
Chamera I	77.05	83.97
Chamera II	24.96	29.60
Chamera III	52.38	59.16
Uri	87.85	96.00
Dhauliganga	51.95	67.15
Dulhasti	120.29	126.14
Sewa II	26.53	31.15
Uri II	70.55	74.87
Parbati III	34.44	37.55
Kishanganga	16.70	13.20
Free Power-Tanakpur	37.78	55.62
Free Power-Dhauliganga	121.27	136.72
Total	**766.92**	**870.05**

4.5.3 *Power Purchase from THDC India Ltd.*

The Commission has considered the availability from generating stations of THDC Ltd. as under:

Table 4.12: Power Purchase from THDC India Ltd.

Stations of THDCIL	Basis	Rationale
Tehri HEP	Average of actual month wise gross generation in FY 2017-18, FY 2018-19 & FY 2019-20 (actual for 10 months, projections for 2 months)	Three years average considered as per the standard approach followed by the Commission in past.
Koteshwar HEP		

The Commission has estimated the energy availability from these generating stations to UPCL at State periphery after considering the normative auxiliary consumption, station wise POC losses approved for the quarter January, 2020 to March, 2020 and considering the share allocation to Uttarakhand. The summary of energy availability from THDC Ltd. for FY 2020-21 at State periphery as estimated by the Petitioner and the Commission is shown in the Table below:

Table 4.13: Energy Availability at State periphery from THDC Ltd. for FY 2020-21 (MU)

State	Estimated by UPCL	Approved
Tehri HEP	106.09	114.10
Free Power-Tehri HEP	358.85	350.72
Koteshwar HEP	75.76	78.95
Free Power-Koteshwar HEP	139.68	137.80
Total	**680.38**	**681.57**

4.5.4 *Power Purchase from NTPC Ltd*

The Commission has considered the availability from generating stations of NTPC Ltd. as under:

Table 4.14: Power Purchase from NTPC Ltd.

Stations of NTPC	Basis	Rationale
Singrauli STPS	Average of actual month wise gross generation in FY 2017-18, FY 2018-19 & FY 2019-20 (actual for 10 months, projections for 2 months)	Actual monthly generation of past 3 years as per the standard approach followed by the Commission
Rihand STPS		
Rihand I		
Rihand II		
Rihand III		
Unchahar TPS		
Unchahar I		
Unchahar II		
Unchahar III		
Anta CCPP		
Auraiya CCPP		
Dadri CCPP		
Dadri (NCTPP)		
Jhajjar		
Kahalgaon TPS		
Koldam		
Unchahar IV	Average Gross Generation as considered by the Petitioner.	As per projection of UPCL.

The Commission has estimated the energy availability from these generating stations to UPCL at State periphery after considering the normative auxiliary consumption, station wise POC losses approved by CERC for the Quarter January 2020 to March 2020 and considering the share allocation to Uttarakhand. The summary of energy availability from NTPC Ltd. for FY 2020-21 at State periphery as estimated by the Petitioner and the Commission is shown in the Table below:

Table 4.15: Energy Availability from NTPC Ltd. at State periphery for FY 2020-21 (MU)

Station	Estimated by UPCL	Approved
Singrauli STPS	695.92	652.74
Rihand STPS		
Rihand I	296.33	273.08
Rihand II	262.45	243.93
Rihand III	305.10	281.34
Unchahar TPS		
Unchahar I	205.86	230.23
Unchahar II	96.38	100.14
Unchahar III	78.67	84.54
Anta CCPP	14.62	23.68
Auraiya CCPP	11.69	22.35
Dadri CCPP	61.76	79.28
Dadri (NCTPP)	21.16	11.77
Jhajjar	54.64	53.14
Kahalgaon TPS	178.70	282.49
Koldam	194.71	212.17
Unchahar IV	140.81	140.01
Total	**2618.80**	**2690.88**

4.5.5 *Power Purchase from SJVN Ltd.*

The Commission has considered the availability from generating stations of SJVN Ltd. as under:

Table 4.16: Power Purchase from SJVN Ltd.

Stations of SJVNL	Basis	Rationale
Nathpa Jhakri HEP	Average of actual month wise gross generation in FY 2017-18, FY 2018-19 & FY 2019-20 (actual for 10 months, projections for 2 months)	Actual monthly generation of past 3 years as per the standard approach followed by the Commission
Rampur HPS		

The Commission has estimated the energy availability from these generating stations to UPCL at State periphery after considering the normative auxiliary consumption, station wise POC losses approved by CERC for the Quarter January 2020 to March 2020 and considering the share allocation to Uttarakhand. The summary of energy availability from SJVN Ltd. for FY 2020-21 as estimated by the Commission is shown in the Table below:

Table 4.17: Energy Availability from SJVN Ltd. at State periphery for FY 2020-21 (MU)

Station	Estimated by UPCL	Approved
Nathpa Jhakri HEP	75.77	81.16
Rampur HPS	205.55	219.58
Total	**281.32**	**300.74**

4.5.6 *Power Purchase from NPCIL Stations*

For estimating the energy availability from these stations, the Commission has considered the monthly average generation for the last three years, i.e. FY 2017-18 to FY 2019-20 (10 months actual and 2 months projection). The Commission has estimated the energy availability from these generating stations to UPCL at State periphery after considering the normative auxiliary consumption, station wise POC losses approved by CERC for the Quarter January 2020 to March 2020 and considering the share allocation to Uttarakhand. The summary of energy availability from NPCIL for FY 2020-21 as estimated by the Commission is shown in the Table below:

Table 4.18: Energy Availability from NPCIL at State periphery for FY 2020-21 (MU)

Station	Estimated by UPCL	Approved
NAPP	153.99	167.80
RAPP	159.45	113.90
Total	**313.44**	**281.70**

4.5.7 *Power Purchase from Renewable Energy Sources*

The existing renewable energy sources includes the hydro power stations of UREDA, IPPs, co-generation plants, and existing as well as upcoming solar power plants within the State and solar power to be received from outside the State. The Commission has considered the energy availability at State periphery as projected by UPCL.

The summary of energy availability from existing renewable energy sources for FY 2020-21 as estimated by the Petitioner and the Commission is shown in the Table below:

Table 4.19: Energy Availability from Renewable Energy Sources for FY 2020-21 (MU)

Station	Estimated by UPCL	Approved
Existing renewable energy sources	1380.85	1264.27

The Commission's projection is less than the Petitioner's projection as the Petitioner had erroneously considered energy availability from new Solar and Non-Solar sources from April 2020 onwards though it has itself submitted that the expected commencement of dispatch of power is from October 2020. The Commission has considered the monthly quantum of power projected by the Petitioner from October to March 2020.

4.5.8 *Power Purchase from Vishnu Prayag HEP and GVK Srinagar (State Royalty Power)*

For estimating the State Royalty power from Vishnu Prayag HEP and GVK Srinagar, the

Commission has considered the average of actual monthly generation for the years FY 2017-18, FY 2018-19 and FY 2019-20 (actual for 10 months, projections for 2 months). The Commission has estimated the energy availability from these generating stations to UPCL at State periphery after considering the normative auxiliary consumption, POC losses approved by CERC for the Quarter January 2020 to March 2020 and considering the free power share of 12% to Uttarakhand. The summary of energy availability from these stations as estimated by the Petitioner and the Commission is shown in the Table below:

Table 4.20: Energy Availability from Vishnu Prayag HEP at State Periphery (State Royalty Power) for FY 2020-21 (MU)

Station	Estimated by UPCL	Estimated by Commission
Vishnu Prayag HEP (State Royalty Power)	218.00	232.18
GVK Srinagar	140.93	134.16

4.5.9 *Power Purchase from Sasan UMPP*

For estimating the energy availability from Sasan UMPP, the Commission has considered the actual monthly generation of FY 2017-18, FY 2018-19 and FY 2019-20 (actual for 10 months, projections for 2 months). The Commission has estimated the energy available from Sasan UMPP to UPCL at State periphery after considering the normative auxiliary consumption, station wise POC losses approved by CERC for the Quarter January 2020 to March 2020 and considering share allocation to Uttarakhand. The summary of energy availability from Sasan UMPP for FY 2020-21 as estimated by the Petitioner and the Commission is shown in the Table below:

Table 4.21: Energy Availability from Sasan UMPP at State periphery for FY 2020-21 (MU)

Station	Estimated by UPCL	Approved
Sasan UMPP	678.54	737.09

4.5.10 *Power purchase from State Gas Generating Station*

The Commission vide its Order dated February 8, 2016 approved the PPA between UPCL and Gama Infrapop (P) Ltd. (Kashipur CCPP), for sale of power corresponding to 107 MW (gross capacity) to UPCL. Further, the Commission vide Order dated July 20, 2016 had approved the PPA between UPCL and Sravanthi Energy Pvt. Ltd. for sale of power corresponding to 214 MW (gross capacity) to UPCL. The Commission also approved the PPA between Beta Infrapop (P) Ltd. for sale of power corresponding to 107 MW (gross capacity) to UPCL. The Commission, accordingly, has considered the energy availability from these stations considering the normative performance parameters in accordance with the Regulations. Considering the present status of Beta Infraprop's station, the Commission has not considered energy availability from the station for FY 2020-21. The Commission has considered the energy availability from the other two stations considering the normative performance parameters in accordance with the Regulations. The summary of energy availability from these stations for FY 2020-21 as estimated by the Petitioner and the Commission is shown in the Table below:

Table 4.22: Energy Availability from State Gas Generating Stations at State periphery for FY 2020-21 (MU)

Station	Estimated by UPCL	Estimated by Commission
Kashipur CCPP	575.77	776.80
Sravanthi	834.22	1553.61
Total	**1409.98**	**2330.41**

4.5.11 *Power purchase from Greenko Budhil Hyrdo*

The Commission vide its Order dated December 26, 2016 had approved the PPA between UPCL and Greenko Budhil Hydro for sale of power corresponding to 70 MW (gross capacity). In light of the above, the Commission, accordingly, has considered the energy availability from the generating station based on the month wise Design Energy. The Commission has estimated the energy available from the generating station to UPCL at State periphery after considering the normative auxiliary consumption, POC losses approved by CERC for the Quarter January 2020 to March 2020 and also excluding the free share of Himachal Pradesh. The summary of energy availability from Greenko Budhil Hydro for FY 2020-21 as estimated by the Commission is shown in the Table below:

Table 4.23: Energy Availability from Greenko Budhil Hydro at State periphery for FY 2020-21 (MU)

Station	Estimated by UPCL	Approved
Greenko Budhil Hydro	243.16	225.68

4.5.12 *Power purchase from upcoming generating stations*

The upcoming generating stations include upcoming solar generating stations, Meja Thermal & Tanda-II and upcoming Hydro Generating Station of Tapovan Vishnugad and Vyasi. The upcoming solar generating stations including SECI-solar, UREDA- solar have already been considered in the energy projections from renewable sources as discussed earlier in this Section.

With regard to upcoming thermal generating station, ex-bus energy availability has been considered as projected by the Petitioner.

With regard to Tapovan Vishnugad and Vyasi, though the Petitioner has submitted that the power flow shall start from December 2020 onwards, however, the Commission taking note of the current progress of works is of the view that the two stations will only be commissioned in FY 2021-22 and, therefore, has not considered energy availability in FY 2020-21.

The summary of energy availability from upcoming generating stations expected to achieve COD during FY 2020-21 as estimated by the Petitioner and the Commission is shown in the Table below:

Table 4.24: Energy Availability from Upcoming Stations at State periphery for FY 2020-21 (MU)

Station	Estimated by UPCL	Approved
Meja Power Plant	166.50	165.54
Tanda-II	166.97	166.48
Vyasi	370.74	0.00
Tapovan Vishnugad	86.87	0.00
Total	**791.07**	**332.03**

4.5.13 *Energy available from Firm Sources*

The total energy available from firm sources estimated by the Petitioner and approved by the Commission is as shown in the Table given below:

Table 4.25: Energy Availability from Firm Sources at State periphery for FY 2020-21 (MU)

Generating Stations	UPCL	Approved
UJVN Ltd.	4163.15	4001.64
NHPC^	766.92	870.05
THDC	680.38	681.57
NTPC*	2618.80	2690.88
NPCIL	313.44	281.70
SJVNL	281.32	300.74
Other Renewable$	1,380.85	1264.27
Free Power-Vishnu Prayag	218.00	232.18
Sasan UMPP	678.54	737.09
Kashipur CCPP	575.77	776.80
Shravanti gas plant	834.22	1553.61
Tanda-II	166.97	166.48
Meja -II	166.50	165.54
Greenko Budhil Hydro	243.16	225.68
GVK Srinagar	140.93	134.16
Tapovan Vishnugad	86.87	0.00
Vyasi	370.74	0.00
Total Firm Sources	**13686.55**	**14082.38**

^Includes Kishanganga
*Includes Unchahar IV and Koldam
$Includes UREDA – Solar, SECI Solar and SECI Non-Solar

4.5.14 *Power Purchase for fulfilling RPO*

UPCL had proposed to fulfill the RPO over and above the estimated power purchase from renewable energy sources by purchase of RECs. UPCL has projected shortfall in meeting both Solar and non-solar RPO. The Petitioner has further, also claimed past unmet RPO (both Solar and Non-Solar) to be met in FY 2020-21. The Commission had specified the RPO target for FY 2020-21 in its UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-Generating Stations) Regulations, 2018. With regard to the Petitioner's claim to carry forward the past unmet targets, the Commission is of the view that it shall consider the issue on merits at the time of truing up on the basis of actual data and detailed reasoning for not fulfilling the RPO targets. The Commisson, based on the estimated power purchase from renewable energy sources, has computed additional power procurement required from Solar and Non-Solar sources for FY 2020-21 as follows.

Table 4.26: Additional Purchase for fulfilling RPO

Particulars	Units	Estimated by UPCL	Approved
Total Power Purchase at State periphery excluding Hydro Energy	MU	8043.72	8853.83
RPO			
Solar	%	8.75%	8.75%
Non-Solar	%	10.25%	10.25%
RPO			
Solar	MU	703.83	774.71
Non-Solar	MU	824.48	907.52
Total	MU	**1528.31**	**1682.23**
Purchase from Renewable Sources			
Solar	MU	833.09	772.50
Non-Solar	MU	746.26	697.04
Additional Energy to be purchased for fulfilment of RPO – Current Year			
Solar	MU	(129.26)	2.21
Non-Solar	MU	78.22	210.48
Past Unmet Target Brought Forward			
Past Unmet -Solar	MU	184.07	-
Past Unmet – Non-Solar	MU	112.61	-
Total to be met in FY 2020-21			
Solar	MU	54.81	2.21
Non Solar	MU	190.84	210.48

The Commission has considered additional power procurement amounting to 212.69 MU to meet the RPO from solar and non-solar sources. The Commission has separately included the cost towards meeting the above RPO through procurement of power from solar and non-solar sources in subsequent Section of this Chapter.

4.5.15 *Deficit/(Surplus) Energy*

The Petitioner, in its Petition has submitted that the availability from the existing stations and upcoming stations shall not be sufficient to meet the increasing demand of the State. Therefore, the Petitioner has to rely on other sources to meet the demand of the State. Accordingly, the Petitioner has projected monthly purchase of power through open market in power deficit months for FY 2020-21.

The Commission has been encouraging the Petitioner to enter into banking arragements so that the surplus energy during the summer months can be utilised during the winter months and, therefore, for computing gap/surplus for the year the Commission has considered the same.

The energy deficit/surplus scenario estimated by the Commission for FY 2020-21 after considering power procurement to meet RPO is as shown in the Table given below:

Table 4.27: Energy deficit/surplus Scenario for FY 2020-21 (MU)

Particulars	FY 2020-21
Energy requirement at State periphery	14831.14
Total Energy available from firm sources	14082.38
Power Procurement to meet RPO	212.69
Deficit/(Surplus)	**536.08**

The Commission while projecting the power purchase cost in Chapter 5, has first projected the monthly power purchase requirement of the Petitioner and monthly availability from various sources. Based on the monthly requirement and availability, it is observed that the surplus power is available in summer months, while in winter months there is a deficit. The Commission has considered forward banking of surplus power available during the summer months to be returned in the winter months in the same year. In case of forward banking in summer months when the other States are having deficit, the State withnesses surplus in availability and, hence, the surplus energy is banked which is available to the Petitioner during winter months with some extra margin. Based on the past trends, the Commission has considered return of forward banked energy in winter months with 10% margin. Thus, during winter months, 110% of energy banked during summer months is considered to meet the deficit.

Further, considering the banked energy available with 10% additional energy, the deficit power purchase to be procured from other sources in FY 2020-21 works out to 487.21 MU.

In view of persistent deficit scenario during the Control Period, the Petitioner should put its sincere efforts to procure the deficit energy optimizing the cost of power purchase and

reliable power. Further, the procurement should be through transparent process of bidding. UPCL is directed to submit a comprehensive plan as to how it intends to meet the deficit for the next year within one month of the date of this Order.

4.5.16 *Cost of Power Purchase*

The Petitioner submitted that the cost of power purchase has been projected based on the following assumptions.

- **UJVN Ltd.**: For procurement of power from 10 LHPs and SHPs of UJVN Ltd., the Petitioner has considered the AFC in FY 2019-20 based on the actual Half yearly data and multiplied it by 2 to project it for the complete year and used an escalation rate of 4% per annum to arrive at the AFC for UJVN Ltd.'s stations for FY 2020-21. The variable and other costs excluding arrears in FY 2019-20 has been computed based on the per unit rate of the actual half yearly data which is then multiplied by the total energy to project the variable and other cost for the complete year and an escalation rate of 4% per annum has been used to arrive at variable and other cost for UJVN Ltd.'s stations for FY 2020-21. The Pettioner submitted that it has considered the water tax and cess in other cost based on actuals.
- **NTPC:** The Petitioner has considered AFC in FY 2019-20 based on the actual Half yearly data and multiplied it by 2 to project it for the complete year and used an escalation rate of 4% per annum to arrive at the AFC for FY 2020-21. The variable and other cost excluding arrears in FY 2019-20 has been computed based on the per unit rate of the actual half yearly data which is then multiplied by the total energy to project the variable and other cost for the complete year and an escalation rate of 4% per annum has been used to arrive at variable and other cost for FY 2020-21.
- **NHPC:** The Petitioner has considered AFC in FY 2019-20 based on the actual half yearly data and multiplied it by 2 to project it for the complete year and used an escalation rate of 4% per annum to arrive at the AFC for FY 2020-21. The variable and other cost Charges excluding arrears in FY 2019-20 has been computed based on the per unit rate of the actual half yearly data which is then multiplied by the total energy to project the variable and other cost for the complete year and an escalation

rate of 4% per annum has been used to arrive at variable and other cost for FY 2020-21.

- **SJVNL:** The Petitioner has considered AFC in FY 2019-20 based on the actual half yearly data and multiplied it by 2 to project it for the complete year and used an escalation rate of 4% per annum to arrive at the AFC for FY 2020-21. The variable and other cost excluding arrears in FY 2019-20 has been computed based on the per unit rate of the actual half yearly data which is then multiplied by the total energy to project the variable and other cost for the complete year and an escalation rate of 4% per annum has been used to arrive at variable and other cost for FY 2020-21.
- **THDC:** The Petitioner has considered AFC in FY 2019-20 based on the actual half yearly data and multiplied it by 2 to project it for the complete year and used an escalation rate of 4% per annum to arrive at the AFC for FY 2020-21. The variable and other cost excluding arrears in FY 2019-20 has been computed based on the per unit rate of the actual half yearly data which is then multiplied by the total energy to project the variable and other cost for the complete year and an escalation rate of 4% per annum has been used to arrive at variable and other cost for FY 2020-21.
- **NPCIL:** The variable and other cost in FY 2019-20 has been computed based on the per unit rate of the actual half yearly data which is then multiplied by the total energy to project the variable and other cost for the complete year and an escalation rate of 4% per annum has been used to arrive at variable and other cost for FY 2020-21.
- **IPPs and Private Projects:** The Petitioner has considered AFC in FY 2019-20 based on the actual half yearly data and multiplied it by 2 to project it for the complete year and used an escalation rate of 4% per annum to arrive at the AFC for Co-Gen, Gas based stations, Other IPPs, Private Projects for FY 2020-21. The variable charge and other cost excluding arrear for Co-Gen, Gas based stations, Other IPPs, Private Projects is based on the per unit rate of the actual half yearly data which is then multiplied by the total energy to project the variable and other cost for the complete year and an escalation rate of 4% per annum has been used to arrive at the variable and other cost for FY 2020-21. The Petitioner submitted that the cost for Solar

Rooftop and UREDA plants has not been projected, as the actual power purchase cost from these sources is zero because no bills were raised in first half of FY 2019-20. As the bills are not raised regularly the cost towards these sources could not be accounted for and shall be considered at the time of true-up.

No quantum of power has been assumed from Meja Thermal I on account of higher variable cost. The Petitioner submitted that it would be planning to procure power from the same as and when required. However, the fixed cost has been considered as the same will have to be paid.

- **Cost of Power from new stations:** For projects, which are under development by the private developers, the rate has been provisionally considered as Rs. 4.00/kWh. ·
- **Cost of Free Power:** The cost of free power has been calculated for FY 2020-21 based on the approach adopted by the Commission in its earlier Tariff orders. The rate of state royalty/free power has been considered equal to the average rate of power procured by the Petitioner from large hydro stations.
- **Short Term Purchase for deficit power:** The Petitioner has proposed to procure the net deficit of 1141.87 MU through short term purchase at the rate of Rs. 4.00 per unit as approved by the Commission in the MYT Order dated February 29, 2019 for the third Control Period.

The Petitioner in its Petition has projected the average power purchase cost of Rs. 3.78/kWh for FY 2020- 21 at State Periphery.

The Commission has estimated the cost of power purchase from various sources as detailed below:

Table 4.28: Approach of the Commission in estimating the Cost of Power Purchase for FY 2020-21

Source	Approach of the Commission in estimating the cost of power purchase
UJVN Ltd.	The Commission has considered the approved Tariff of UJVN Ltd. (9 LHPs) for FY 2020-21. As per the GoU Notification No. 601/1(2)/04(1)-1/2007 dated May 31, 2017, GoU imposed a cess of Rs. 0.30/kWh and royalty of Rs. 0.10/kWh on saleable energy generated from hydro generating stations which are under commercial operation for 10 or more years with cost of generation below Rs. 2/kWh with effect from the date of notification. Hence, additional impact on account of the same has been considered. For SHPs, the Commission has considered the applicable Tariff for such generating stations as specified in the Renewable Energy Regulations or Orders of the Commission. Further, the Commission has considered the Water Tax equivalent to Water Tax considered by UPCL.
NHPC Ltd., THDC Ltd., SJVN Ltd.	The tariff for these stations has been considered equal to approved Annual Fixed Charges (AFC) for FY 2018-19 as Tariff Orders for FY 2019-20 are yet to be issued. The AFC for FY 2018-19 has then been escalated at the rate of 4% p.a. to arrive at the AFC for FY 2020-21.
NTPC Ltd.	The Annual Fixed Charges for these stations have been considered equal to approved Annual Fixed Charges for FY 2018-19 as Tariff Orders for FY 2019-20 are yet to be issued. The AFC for FY 2018-19 has then been escalated at the rate of 4% p.a. to arrive at the AFC for FY 2020-21. For estimating the Energy Charges for FY 2019-20, to avoid substantial impact of quarterly FCA, the weighted average rate of actual Energy Charges for the months of October 2019 to December 2019 has been considered with an escalation of 4%.
NPCIL	The tariff for NPCIL stations has been considered based on the actual billing during FY 2019-20 and escalated by 4% to determine the costs for FY 2020-21.
Renewable energy sources	The applicable tariffs for the respective generating stations within the State have been considered at the rates proposed by the Petitioner.
Sasan UMPP	The applicable tariff for FY 2020-21 as per the PPA has been considered.
Gama CCPP	The annual fixed charges for these stations have been considered as approved by the Commission for FY 2020-21. For estimating the Energy Charges for FY 2020-21, the Commission has computed energy charge considering cost of gas as $ 7.20/MMBTU. Further, the Commission has considered impact of truing up of FY 2018-19 including true up of Energy Charges.
Shravanti CCPP	The annual fixed charges for these stations have been considered as approved by the Commission for FY 2020-21. For estimating the Energy Charges for FY 2020-21, the Commission has computed energy charge considering the cost of gas as $ 7.20/MMBTU. Further, the Commission has considered impact of truing up of FY 2018-19 including true up of Energy Charges.
Greenko Budhil Hydro	The annual fixed charges for these stations have been considered as approved by the Commission for FY 2020-21 including truing up impact of FY 2018-19.
Additional purchase for fulfilling RPO	The Tariff for the additional purchase for fulfilling the solar RPO as well as non-solar RPO has been considered as Rs. 4.75/kWh at State periphery and the Petitioner shoud seek to buy actual power in deficit months to meet the RPO.
Upcoming Stations	For upcoming renewable generating stations within the State, the applicable Tariff as per the Renewable Energy Regulations has been considered. For other upcoming stations, the tariff of Rs. 4/kWh has been considered for FY 2020-21 at this stage. For Meja I as the Petitioner has not

Table 4.28: Approach of the Commission in estimating the Cost of Power Purchase for FY 2020-21

<table>
<tr><th>Source</th><th>Approach of the Commission in estimating the cost of power purchase</th></tr>
<tr><td></td><td>considered generation from the station owing to high variable cost and that the station is under forced breakdown since October 2019, the Commission has not projected generation cost towards the same. The Commission shall consider the same at the time of truing up.</td></tr>
<tr><td>Deficit purchase</td><td>The tariff for deficit purchase has been considered as Rs. 4.00/kWh at State periphery.</td></tr>
<tr><td>Cost of free power</td><td>The cost of free power has been computed in line with the methodology adopted by the Commission in its previous Tariff Orders as shown below:
<table>
<tr><th rowspan="2">Particulars</th><th>Quantum</th><th>Total Cost</th><th>Average Cost</th></tr>
<tr><th>MU</th><th>Rs. Crore</th><th>Rs./kWh</th></tr>
<tr><td>UJVN Ltd. (9 LHPs)</td><td>2527.13</td><td>359.41</td><td>1.42</td></tr>
<tr><td>Maneri Bhali II</td><td>1291.56</td><td>197.43</td><td>1.53</td></tr>
<tr><td>NHPC</td><td>677.71</td><td>254.95</td><td>3.76</td></tr>
<tr><td>THDC</td><td>193.05</td><td>114.23</td><td>5.92</td></tr>
<tr><td>SJVNL</td><td>300.74</td><td>124.11</td><td>4.13</td></tr>
<tr><td>Greenko</td><td>225.68</td><td>87.61</td><td>3.88</td></tr>
<tr><td>Koldam</td><td>212.17</td><td>116.62</td><td>5.50</td></tr>
<tr><td>Average</td><td>5428.04</td><td>1254.35</td><td>2.32</td></tr>
</table>
</td></tr>
</table>

The summary of estimated power purchase cost for FY 2020-21 is as shown in the Table below:

Table 4.29: Summary of Power Purchase Cost for FY 2020-21

Particulars	Claimed			Approved		
	PP at State periphery	Total Cost	Average Rate	PP at State periphery	Total Cost	Average Rate
	MU	Rs. Crore	Rs. /kWh	MU	Rs. Crore	Rs. /kWh
UJVN Ltd.						
UJVN Ltd. (9 LHPs)	2710.85	468.64	1.73	2527.13	457.31	1.81
Maneri Bhali II	1265.23	377.53	2.98	1291.56	249.09	1.93
Small Hydro	187.07	38.60	2.06	182.94	30.64	1.67
Total UJVN Ltd.	**4163.15**	**884.77**	**2.13**	**4001.64**	**737.04**	**1.84**
NHPC						
Salal	36.88	6.38	1.73	40.89	6.64	1.62
Tanakpur	8.27	5.59	6.76	18.03	7.90	4.38
Chamera I	77.05	17.09	2.22	83.97	18.34	2.18
Chamera II	24.96	6.15	2.46	29.60	6.41	2.16
Chamera III	52.38	28.95	5.53	59.16	26.43	4.47
Uri	87.85	17.89	2.04	96.00	19.50	2.03
Dhauliganga	51.95	18.56	3.57	67.15	17.36	2.59
Dulhasti	120.29	72.47	6.02	126.14	64.54	5.12

Table 4.29: Summary of Power Purchase Cost for FY 2020-21

Particulars	Claimed			Approved		
	PP at State periphery	Total Cost	Average Rate	PP at State periphery	Total Cost	Average Rate
	MU	Rs. Crore	Rs. /kWh	MU	Rs. Crore	Rs. /kWh
Sewa II	26.53	17.35	6.54	31.15	17.76	5.70
Uri II	70.55	43.69	6.19	74.87	35.35	4.72
Parbati III	34.44	25.29	7.34	37.55	26.51	7.06
Kishanganga	16.70	6.81	4.08	13.20	8.20	6.21
Free Power-Tanakpur	37.78	10.93	2.89	55.62	12.91	2.32
Free Power-Dhauliganga	121.27	35.08	2.89	136.72	31.72	2.32
Total NHPC	**766.92**	**312.24**	**4.07**	**870.05**	**299.58**	**3.44**
THDC						
Tehri HEP	106.09	46.46	4.38	114.10	67.80	5.94
Free Power-Tehri HEP	358.85	103.81	2.89	350.72	81.38	2.32
Koteshwar HEP	75.76	43.43	5.73	78.95	46.43	5.88
Free Power-Koteshwar HEP	139.68	40.41	2.89	137.80	31.97	2.32
Total THDC	**680.38**	**234.10**	**3.44**	**681.57**	**227.59**	**3.34**
NTPC						
Singrauli STPS	695.92	150.58	2.16	652.74	153.49	2.35
Rihand STPS						
Rihand I	296.33	65.39	2.21	273.08	84.59	3.10
Rihand II	262.45	46.30	1.76	243.93	58.50	2.40
Rihand III	305.10	83.03	2.72	281.34	89.94	3.20
Unchahar TPS						
Unchahar I	205.86	105.01	5.10	230.23	116.70	5.07
Unchahar II	96.38	49.06	5.09	100.14	50.11	5.00
Unchahar III	78.67	41.91	5.33	84.54	45.47	5.38
Anta CCPP	14.62	20.93	14.31	23.68	23.50	9.93
Auraiya CCPP	11.69	24.75	21.17	22.35	26.84	12.01
Dadri CCPP	61.76	54.96	8.90	79.28	65.63	8.28
Dadri (NCTPP)	21.16	10.02	4.73	11.77	7.38	6.27
Jhajjar	54.64	43.52	7.96	53.14	38.77	7.30
Kahalgaon TPS	178.70	62.90	3.52	282.49	89.91	3.18
Koldam	194.71	118.16	6.07	212.17	116.62	5.50
Unchahar IV	140.81	80.75	5.73	140.01	56.00	4.00
Total NTPC	**2618.80**	**957.27**	**3.66**	**2690.88**	**1023.45**	**3.80**
NPCIL						
Narora APP	153.99	42.09	2.73	167.80	50.71	3.02
Rajasthan APP	159.45	57.82	3.63	113.90	50.63	4.44
Total NPCIL	**313.44**	**99.91**	**3.19**	**281.70**	**101.34**	**3.60**
SJVNL						
Nathpa Jhakri HEP	75.77	20.88	2.76	81.16	21.45	2.64
Rampur HPS	205.55	97.93	4.76	219.58	102.66	4.68
Total SJVNL	**281.32**	**118.81**	**4.22**	**300.74**	**124.11**	**4.13**
Renewables	**1,380.85**	**624.89**	**4.53**	**1264.27**	**570.99**	**4.52**
Free Power-Vishnu Prayag	218.00	63.06	2.89	232.18	53.87	2.32
Sasan UMPP	678.54	130.27	1.92	737.09	103.19	1.40

Table 4.29: Summary of Power Purchase Cost for FY 2020-21

Particulars	Claimed			Approved		
	PP at State periphery	Total Cost	Average Rate	PP at State periphery	Total Cost	Average Rate
	MU	Rs. Crore	Rs. /kWh	MU	Rs. Crore	Rs. /kWh
Gama CCPP	575.77	436.05	7.57	776.80	456.68	5.88
Shravanti CCPP	834.22	757.40	9.08	1553.61	977.40	6.29
Total Gas	**1409.98**	**1193.45**	**8.46**	**2330.41**	**1434.09**	**6.15**
Meja -I	-	14.67	-	-	-	-
Meja - II	166.50	69.52	4.18	165.54	66.22	4.00
Tanda-II	166.97	69.72	4.18	166.48	66.59	4.00
Greenko Budhil Hydro	243.16	99.09	4.08	225.68	87.61	3.88
GVK Srinagar	140.93	40.77	2.89	134.16	31.13	2.32
Vyasi	370.74	148.30	4.00	-	-	-
Tapovan Vishnugad	86.87	36.27	4.18	-	-	-
Total Firm Sources	13686.55	5097.10	3.72	14082.38	4926.79	3.50
Deficit Purchase	1121.57	456.75	4.07	487.21	194.88	4.00
Cost for meeting RPO	-	36.85	-	212.69	101.03	4.75
Banking including additional banked energy	-	-	-	48.87	29.87	
Total	**14808.12**	**5590.69**	**3.78**	**14831.14**	**5252.57**	**3.54**

The Commission, further, directs the Petitioner to seek prior approval of the Commission, in case the variation in power purchase quantum or total power purchase cost in any quarter exceeds by more than 5% of the approved power purchase quantum and cost for the respective quarter worked out on pro-rata basis from the total approved quantum and cost for FY 2020-21 as indicated in the Table below, failing which, the Commission may disallow power purchases so made while Truing up the ARR for FY 2020-21.

Table 4.30: Quarterly Power Purchase approved by the Commission for FY 2020-21

Quarter	Sales (MU)	Power Purchase Quantum (MU)	Power Purchase Cost (Rs. Crore)
April – June	3097.55	3652.95	1,293.72
July – September	3318.17	3913.12	1,385.86
October – December	3148.15	3712.61	1,314.85
January – March	3012.34	3552.46	1,258.13
Total	**12576.21**	**14831.14**	**5252.57**

Moreover, it has been observed that the Petitioner has been continuously resorting to short term power purchase. In this regard, third provison of Regulation 73(1) of UERC Tariff Regulations, 2018 is reproduced hereunder:

> *"Provided that the power procurement plan submitted by the Distribution Licensee may include long-term, medium-term and short-term power procurement sources of power, in accordance with these Regulations.* ***However, the distribution licensee should as far as possible, not plan for short-term purchases except for conditions specified in Regulations 75 and should endeavour to meet its requirement from long term and medium term power procurement and make a plan accordingly****."*

(Emphasis added)

Regulation 75 specifies the circumstances under which short term power procurement may be made by the distribution licensee without seeking prior approval of the Commission. However, Regulation 75(5) specifies as under:

> *"(5) Within fifteen (15) days from the date of entering into an agreement or arrangement for short-term power procurement for which prior approval is not required, the Distribution Licensee shall provide the Commission, full details of such agreement or arrangement, including quantum, tariff calculations, duration, supplier details, method for supplier selection and such other details as the Commission may require with regard to such agreement/arrangement to assess that the conditions specified in this Regulation have been complied with:"*

While projecting the power purchase requirement of the Petitioner for FY 2020-21, it has been observed that the Petitioner is having deficits in some of the month particularly during winter months. **Accordingly, the Petitioner is directed to prepare its power purchase plan for the next year and initiate the bidding process to meet the deficit, if any. The Petitioner is directed to submit an action plan in this regard within 15 days of the date of Order. The Petitioner is also directed to ensure compliance of the Regulations issued by the Commission from time to time, failing which any consequent liability would be to the account of the Petitioner.**

The base Energy Charges of thermal stations (base fuel cost) for the purpose of computation of FCA is given in the Table below:

Table 4.31: Energy Charges of thermal generating stations for FY 2020-21

Generating Station	Energy Charges (Rs. /kWh)
Singrauli STPS	1.608
Rihand I	2.154
Rihand II	1.619
Rihand III	1.597
Unchahar I	3.928
Unchahar II	3.960
Unchahar III	3.928
Anta CCPP	4.319
Auraiya CCPP	3.772
Dadri CCPP	5.878
Dadri (NCTPP)	4.360
Jhajjar	4.080
Kahalgaon TPS	2.347
Gamma CCPP	4.295
Shravanti CCPP	4.295

4.6 Transmission Charges

4.6.1 *Inter-State Transmission Charges Payable to PGCIL*

The Petitioner submitted that it has considered the actual inter-state transmission charges for first six months excluding arrears of FY 2019-20 to compute the average per unit rate of PGCIL transmission charges by dividing the total amount paid to PGCIL by the total units wheeled. The computed rate for FY 2019-20 is escalated by 5% to arrive at the Inter-State Transmission Charges. The total PGCIL transmission charges have been computed considering the escalated per unit transmission charge and projected total units required to be wheeled through PGCIL network. The Petitioner has proposed the Inter-State Transmission Charges of Rs. 373.37 Crore. The Commission has computed the per unit transmission charges for FY 2020-21 on the basis of actual per unit charges paid during April 2019 to September 2019 excluding arrears and has escalated the same at the rate of 4% per annum to arrive at the per unit transmission charges for FY 2020-21 and has approved the PGCIL charges for FY 2020-21 considering the energy to be received from outside the State. The Commission in accordance with the above approach has approved Inter-State transmission charges as Rs. 429.89 Crore which shall be subject to true up based on the actual expenses incurred.

4.6.2 *Intra-State Transmission Charges payable to PTCUL*

The Petitioner submitted that the Intra-State Transmission Charges including SLDC charges for FY 2020-21 has been projected by considering the transmission charges approved by the Commission for FY 2020-21 in its MYT Order dated February 27, 2019.

The Commission has approved the Annual Transmission Charges for PTCUL and SLDC charges of Rs. 249.57 Crore for FY 2020-21 vide its Order dated April 18, 2020. Hence, the Commission has considered the same in the approval of ARR for FY 2020-21 for the Petitioner. The Commission has also considered an amount of Rs. 36.92 Crore to be paid towards usage of 400 kV Srinagar Sub-station.

The Transmission Charges claimed by the Petitioner and approved by the Commission for FY 2020-21 is as shown in the Table given below:

Table 4.32: Transmission Charges for FY 2020-21 (Rs. Crore)

Particulars	Claimed by UPCL	Approved
Inter-State Transmission Charges	373.37	429.89
Intra-State Transmission Charges	415.45	286.49
Total	**788.82**	**716.38**

4.7 Water tax

The Petitioner submitted that the water tax has been considered as a part of other charges while projecting the per unit cost of stations of UJVN Ltd. including SHPs and has not separately computed the same. The Commission has approved the water tax of Rs. 260.06 Crore for FY 2020-21 as proposed by the Petitioner.

4.8 GFA and Additional Capitalisation

4.8.1 *GFA base for FY 2020-21*

The Commission vide its MYT Order dated February 27, 2019 on approval of ARR for FY 2020-21 had approved the capitalisation of Rs. 577.22 Crore and Rs. 591.96 Crore for FY 2019-20 and FY 2020-21 respectively. As against the same, the Petitioner has proposed the capitalisation of Rs. 937.06 Crore and Rs. 977.22 Crore for FY 2019-20 and FY 2020-21 respectively.

The Petitioner in its Petition has submitted that in order to achieve the anticipated load growth and target loss reduction, it has carried out the detailed analysis of capital investment required for FY 2019-20 and FY 2020-21. The Petitioner further submitted that the investment plan has been projected based on various technical and physical requirements discussed at senior management level. The Petitioner with regards to the capital cost submitted that the same has been projected based on the historical trends and stock issue rate of UPCL for FY 2018-19 with suitable escalations for FY 2019-20 and FY 2020-21. The Petitioner projected capital expenditure for FY 2019-20 as Rs. 1158.79 Crore and for FY 2020-21 as Rs. 745.36 Crore amounting to Rs. 1904.15 for the two years. Out of this, Rs. 790.52 Crore are proposed for Central schemes like R-APDRP, DDUGJY, IPDS and SAUBHAGYA while the remaining Rs. 1113.63 Crore are proposed for the internal schemes proposed by UPCL. The Petitioner further submitted that the capital investment is proposed under the following benefit centres:

a) Growth development plan to meet the load growth
b) Loss reduction
c) System reliability and safety improvement
d) Creation of Infrastructure Facilities & other misc. works

The Petitioner has further submitted various schemes to achieve the above targets as shown below:

a) Growth Development Plan to meet the load growth:
   i. Construction of 33/11 kV Substation & associated 33 kV and 11 kV Lines for strengthening of Distribution System
   ii. Release of New PTW Connections
   iii. Installation of meters for giving new connections
   iv. Installations of Breakers
   v. CSS 990 kVA where two transformers are installed at the same place.
   vi. Laying of LT lines for new connections

b) Loss reduction
   i. Implementation of AMR
   ii. 11 kV and 33 kV covered cable for forest
   iii. Laying of LT ABC cables in theft prone areas
   iv. Replacement of defective single phase and three phase meters
   v. Pre-paid meters
   vi. Laying of 11 kV and 33 kV underground cables

c) System reliability & safety improvement:

   i. Additional Transformers installation with associated 11 kV and LT lines
   ii. Installation of LT protection system on the transformers
   iii. Safety Measures
   iv. Smart Grid projects for industrial areas

d) Creation of infrastructure facilities & other misc. works:

   i. Procurement of Sub-station and high value consumer meter testing and diagnostics equipment
   ii. Consumer care centres, E-payment of bills and Cash collection centres
   iii. Non-R-APDRP (IT Expenses)
   iv. R&M/Capacity Augmentation of Workshops etc.

The Petitioner in its Petition estimated that the expenditure incurred towards Central Schemes would be capitalized in the ratio of 60:40 in FY 2019-20 and FY 2020-21 respectively in line with the Commission's approach. While the balance capital expenditure shall be capitalised as 40%, 40% and 20% over three years starting FY 2019-20. The Petitoner further submitted that the Opening CWIP for FY 2019-20 shall be capitalised in the same ratio as proposed for Central Schemes.

The Petitioner has, accordingly, proposed the additional capitalisation of Rs. 937.06 Crore and Rs. 977.22 Crore for FY 2019-20 and FY 2020-21 respectively. The capital expenditure and additional capitalisation as proposed in the Petition is as shown in the Table below:

Table 4.33: Proposed Capital Expenditure and Capitalisation for FY 2019-20 and FY 2020-21 (Rs. Crore)

Particulars	Proposed Capital expenditure	Capitalization As per Tariff Petition
	Rs. Crore	Rs. Crore
FY 2019-20	1158.79	937.06
FY 2020-21	745.36	977.22
Total	**1904.15**	**1914.28**

The Commission has gone through the submissions of the Petitioner. It is observed that the Petitioner has projected higher capitalisation in FY 2019-20 and FY 2020-21 than that approved in the MYT Order dated February 27, 2019. The Commisison in its MYT Order had observed that the Petitioner in the past had projected higher capitalisation at the time of tariff determination, however, the actual capitalisation historically achieved by the Petitioner is considerably lower. The actual GFA addition carried out by UPCL in the last four years is as shown in the Table below:

Table 4.34: Actual Gross GFA addition of UPCL (Rs. Crore)

Year	Amount
FY 2015-16	370.76
FY 2016-17	321.99
FY 2017-18	465.14
FY 2018-19	1009.90

Barring FY 2018-19 wherein almost 61% of the assets were funded through grants in schemes like DDUGVY, RAPDRP etc., the capitalisation achieved during the last four years is considerably lower than the capitalisation proposed for FY 2019-20 and FY 2020-21. The Commission asked UPCL to submit the status of capital works (both physical and financial) which has been proposed in FY 2019-20 and FY 2020-21. In response UPCL submitted the same.

The Commission in its MYT Order had already taken a view on the capital expenditure after detailed analysis and, therefore, the Commission finds no reason to revise the same considering the historical achievement with regard to the capitalisation.

The Commission has, therefore, considered the capitalisation for FY 2019-20 and FY 2020-21 as approved in MYT Order dated February 27, 2019. However, during the Annual Performance Review/Truing-up exercise, the Commission shall consider the Capitalisation on actual basis subject to capitalisation of only those Schemes which fulfill the conditions as stipulated by the Commission. The Commission has, accordingly, approved the following capitalization and GFA for FY 2020-21.

Based on the above, the GFA base approved by the Commission for FY 2020-21 is as shown in the Table below:

Table 4.35: GFA base approved by the Commission for FY 2020-21 (Rs. Crore)

S. No.	Particulars	Approved in the Tariff Order	Claimed by UPCL	Approved
1.	Opening Value	5259.80	6491.21	5549.79
2.	Total addition during the year	591.96	977.22	591.96
3.	Less: Deletions during the year	0.00	0.00	0.00
4.	Closing value	5851.76	7468.43	6141.75

4.9 Means of Finance

The Commission, as discussed in this Order, has considered the capitalisation as approved in the MYT Order for the third Control Period and, therefore, the financing of the approved capitalisation has also been considered as same as considered in the MYT Order dated February 27, 2019 which is as shown in the Table below.:

Table 4.36: Means of Finance approved by the Commission (Rs. Crore)

Particulars	FY 2019-20	FY 2020-21
Capitalisation	577.09	591.96
Financing		
Debt	269.90	276.85
Equity	115.67	118.65
Grant	191.53	196.46
Total	**577.09**	**591.96**

4.10 Interest and Finance Charges

The Petitioner submitted that the interest on loan for FY 2020-21 has been computed by considering the revised closing balance of FY 2018-19 based on the addition in FY 2018-19. Further, the closing balance of FY 2018-19 has been considered as opening balance for FY 2019-20 and subsequently the proposed capitalisation for FY 2019-20 has been added to arrive at the closing balance of FY 2019-20 which has then been taken as the opening balance of FY 2020-21. The Petitioner further submitted that new loans for FY 2019-20 and FY 2020-21 has been considered as per the means of financing of capitalization, while the repayment has been considered equivalent to the depreciation for FY 2019-20 and FY 2020-21 in line with the UERC Tariff Regulations, 2018. Rate of interest of 11.00% has been applied which is similar to actuals incurred in FY 2018-19 and in line with the existing arrangement of loans with REC and PFC and other financial institutions.

The Petitioner submitted that it has considered interest against REC (Old Loans) as per the repayment schedule in accordance with the Tariff Order for FY 2009-10 dated October 23, 2009 and as shown in the Table below.

Table 4.37: Repayment Schedule for REC old loans (Rs. Crore)

Particulars	Repayment Schedule for REC old loans
FY 2019-20	11.49
FY 2020-21	11.49

The Petitioner has claimed yearly financing charges of Rs. 3.52 Crore for FY 2019-20 and 2020-21. The Petitioner has claimed yearly guarantee fee of Rs. 3.04 Crore for FY 2019-20 and FY 2020-21. The Petitioner further submitted that it has not considered interest towards GPF loan.

Accordingly, the Petitioner has claimed the total interest and financing charges of Rs. 120.64 Crore, and Rs. 141.69 Crore for FY 2019-20 and FY 2020-21 respectively.

For computing the interest on security deposit, the Petitioner has considered addition in consumer security deposit for FY 2018-19 and has escalated the same based on the projected number of consumers and the average amount of consumer security deposit per consumer added in FY 2018-19. The Petitioner has considered interest rate of 5.75% and has, accordingly, claimed the interest on consumer security deposit of Rs. 50.13 Crore and Rs. 53.74 Crore for FY 2019-20 and FY 2020-21 respectively.

Regulation 27 of the UERC Tariff Regulations, 2018 specifies as follows:

*"**27. Interest and finance charges on loan capital and on Security Deposit***

(1) The loans arrived at in the manner indicated in Regulation 24 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 01.04.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.03.2019 from the approved gross normative loan.

(3) The repayment for each year of the Control Period shall be deemed to be equal to the depreciation allowed for that year…

…

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio of the previous year after providing appropriate accounting adjustment for interest capitalised:

…

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

…"

As stated earlier the Commission is not revising the ARR for FY 2019-20 and has, therefore, computed interest charges pertaining to FY 2020-21 only. The Commission has considered the closing loan balance for FY 2018-19 as opening loan balance for FY 2019-20. Thereafter, the Commission has considered the loan addition during FY 2019-20 as per the approved means of finance for FY 2019-20. The Commission has considered the closing loan balance for FY 2019-20 as the opening loan balance for FY 2020-21. The Commission has considered the loan addition during

FY 2019-20 and FY 2020-21 as per the approved Financing Plan. The Commission has considered the normative repayment equivalent to the approved depreciation for FY 2019-20 and FY 2020-21. The Commission has considered the interest rate of 10.23% which is the weighted average rate of interest for FY 2018-19. The Commission has determined the interest on loan by applying the interest rate of 10.23% on the amount of average of the opening loan & closing loan excluding the loan additions corresponding to the assets capitalised for FY 2020-21. The Commission has not allowed interest on additions during the year as the Petitioner capitalises the assets at the end of the financial year and during the year, whatever interest accrues on the loan portion corresponding to the capital expenditure, the same is Interest during construction and is capitalised as CWIP. In addition to the above, the Commission has considered interest on account of REC Old Loan of Rs. 11.49 Crore. With regards to the guarantee fee, the Commission has considered the same amount as approved for FY 2018-19, i.e. Rs. 1.52 Crore. The financing charges of Rs. 3.52 Crore as considered for FY 2018-19 has also been considered for FY 2020-21. Interest on security deposit has been considered as Rs. 53.74 Crore as claimed by the Petitioner. Thus, the total interest expenses approved for FY 2020-21 works out to Rs. 137.46 Crore as against the claim of Rs. 195.43 Crore. The interest on loan approved by the Commission for FY 2020-21 is as shown in the Table given below:

Table 4.38: Interest on Loan approved by the Commission for FY 2020-21 (Rs. Crore)

Particulars	Claimed	Allowable
Opening Loan balance	997.16	740.31
Drawal during the year	455.00	276.85
Repayment during the year	201.30	167.47
Closing Loan balance	1250.86	849.70
Interest Rate	11.00%	10.23%
Interest on Loan	123.64	**67.19**
Interest on Consumer Security Deposit	**53.74**	**53.74**
Interest on REC Old Loan	**11.49**	**11.49**
Guarantee Fee	**3.04**	**1.52**
Financing Charges	**3.52**	**3.52**
Total Interest	**195.43**	**137.46**

4.10.1 *Depreciation*

The Petitioner submitted that the asset class wise depreciation has been computed considering the average GFA and the rates of depreciation specified in the UERC Tariff Regulations, 2018. The Petitioner submitted that the average depreciation rate of 5.21% has been applied on the average GFA for each year computed as per actual capitalization for FY 2018-19 and proposed capitalization for FY 2019-20 and FY 2020-21. Assets created from grants and deposit works have been excluded for the purpose of depreciation as per the provisions of the UERC Tariff Regulations, 2018.

Accordingly, the Petitioner has proposed the depreciation of Rs. 201.30 Crore for FY 2020-21.

Regulation 28 of the UERC Tariff Regulations, 2018 specifies as follows:

*"**28. Depreciation***

(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

Provided that no depreciation shall be allowed on assets funded through Consumer Contribution and Capital Subsidies/Grants.

(2) 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.

...

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix - II to these Regulations.

…"

In the absence of complete Fixed Asset Register, the Commission at this stage has considered the weighted average rate of 5.20% computed for FY 2018-19 and has applied the same on the opening depreciable GFA for FY 2020-21.

The depreciation approved by the Commission for FY 2020-21 is as shown in the Table given below:

Table 4.39: Depreciation approved for FY 2020-21 (Rs. Crore)

Particulars	FY 2020-21	
	Claimed	**Allowable**
Opening GFA	-	5549.79
Grants	-	2328.63
Depreciable opening GFA	3538.73	3221.16
Net addition during the year	650.00	395.50
Closing GFA	4188.73	3616.65
Depreciation rate	5.21%	5.20%
Depreciation	**201.30**	**167.47**

4.10.2 *Operation and Maintenance expenses*

Regulation 84 of the UERC Tariff Regulations, 2018, with regard to the Operation and Maintenance expenses, specifies as follows:

*"**84. Operation and Maintenance Expenses***

(1) The O&M expenses for the first year of the Control Period will be approved by the Commission taking into account actual O&M expenses for last five years till Base Year subject to prudence check and any other factors considered appropriate by the Commission.

(2) The O&M expenses for the nth year and also for the year immediately preceding the Control Period i.e., FY 2018-19 shall be approved based on the formula given below: -

$O\&M_n = R\&M_n + EMP_n + A\&G_n$

Where –

- *O&Mn – Operation and Maintenance expense for the nth year;*
- *EMPn – Employee Costs for the nth year;*
- *R&Mn – Repair and Maintenance Costs for the nth year;*
- *A&Gn – Administrative and General Costs for the nth year;*

(3) The above components shall be computed in the manner specified below:

$EMP_n = (EMP_{n-1}) \times (1+G_n) \times (1+CPI_{inflation})$

$R\&Mn = K \times (GFA_{n-1}) \times (1+WPI_{inflation})$ *and*

$A\&Gn = (A\&G_{n-1}) \times (1+WPI_{inflation}) + Provision$

Where –

- EMP_{n-1} *– Employee Costs for the (n-1)th year;*
- *A&Gn-1 – Administrative and General Costs for the (n-1)th year;*

Provision: Cost for initiatives or other one-time expenses as proposed by the Distribution Licensee and approved by the Commission after prudence check.

- *"K" is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on* *licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;*

- *CPI inflation – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;*
- *WPI inflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;*
- *GFAn-1 - Gross Fixed Asset of the distribution licensee for the n-1th year;*
- *Gn is a growth factor for the nth year. Value of Gn shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on licensee's filings, benchmarking and any other factor that the Commission feels appropriate:*

Provided that repair and maintenance expenses determined shall be utilised towards repair and maintenance works only."

The O&M expenses include Employee expenses, R&M expenses and A&G expenses. In accordance with Regulation 84 of the UERC Tariff Regulations, 2018, the O&M expenses for the second year of the Control Period shall be determined by the Commission taking into account the actual O&M expenses of the previous years and any other factors considered appropriate by the Commission. The submissions of the Petitioner and the Commission's analysis on the O&M expenses for FY 2020-21 is detailed below.

4.10.2.1Employee Expenses

The Commission had approved the employee expenses of Rs. 374.02 Crore for FY 2019-20 in its MYT Order dated February 27, 2019 while approving the ARR for FY 2019-20. As against the same, the Petitioner has computed the employee expenses for FY 2019-20 as Rs. 345.67 Crore as per the UERC Tariff Regulations, 2018 considering the actual employee expenses for FY 2018-19.

The Petitioner submitted that the employee expenses for FY 2020-21 has been proposed as per the UERC Tariff Regulations, 2018 considering the actual employee expenses for FY 2018-19. The Petitioner has first estimated the opening normative gross employee expenses for FY 2019-20 considering the actual employee expenses during FY 2018-19 (excluding arrears of Seventh Pay

Commission paid during FY 2018-19). The Petitioner has considered the CPI inflation of 4.21% per annum which is the average increase in CPI for preceding three years till the base year (FY 2016-17 to FY 2018-19). The Petitioner has considered the growth factor for each year based on the net addition in employees during each year. Further, the Petitioner has considered the actual capitalisation of 17.21% for the base year, i.e FY 2018-19 for projections of third Control Period. The Petitioner has then added impact of VII pay commission to compute the employee expenses for FY 2020-21. Accordingly, the Petitioner has proposed the employee expenses of Rs. 467.76 Crore for FY 2020-21.

The Commission has computed the employee expenses in accordance with the UERC Tariff Regulations, 2018. In accordance with the UERC Tariff Regulations, 2018, the Gn (growth factor) is to be considered in the computation of employee expenses. The Commission, in the approval of the Business Plan for the third Control Period from FY 2019-20 to FY 2020-21, based on the approved HR Plan computed the Gn factors of 2.21% and 16.41% for FY 2019-20 and FY 2020-21 respectively based on the recruitment of 600 employees and 537 employees approved for FY 2019-20 and FY 2020-21 respectively. As against the same, the Petitioner in its Petition submitted revised Gn of 0.00% for FY 2019-20 and 33% for FY 2020-21. The Commission vide its letter dated December 09, 2019 sought the current status of recruitment and its preparedness of recruitment. The Petitioner in its reply dated December 27, 2019 submitted the current status of various recruitment under two categories.

a. Vacancies for which approval of the State Government has already been received. The Petitioner submitted the detailed status of such vacancies as follows:

Table 4.40: Vacant Posts for which GoU approval has been received

S. No.	Post	No. of Posts	Status
1.	Assistant Engineer (Trainee) (E&M)	72	• Govt. vide letter no.-1320/I(2)/2019-06(2)-14/2016 dated 05-08-2019 has given the permission to fill up the 105 posts for Direct Recruitment. • Corporation vide letter no.-2705 dated 05-08-2019 & letter no.-3424 dated 25-09-2019 have requested the Govt. to nominate the recruiting agency for conducting the recruitment process for 105 posts of Direct Recruitment.
2.	Assistant Engineer (Trainee) (Civil)	07	
3.	Account Officer	15	
4.	Law Officer	02	
5.	Personnel Officer	08	
6.	Sr. Industrial Engineer	01	
Total		**105**	

b. Vacancies for which approval of the State Government is awaited. The Petitioner further submitted the detailed status of such vacancies as follows:

Table 4.41: Vacant Posts for which approval of GoU is awaited.

S. No.	Post	No. of Posts	Status
1.	Company Secretary	01	• Through Corporation letter no. 816/ Dir (HR) /UPCL/ KF-22 dated 22-03-2019 & letter no. 817-Dir(HR)/UPCL/KF-22 dated 22-03-2019 letters have been sent to the GOU for the permission to fill up the posts of direct recruitment.
2.	Junior Engineer (E&M)	160	
3.	TG-2(E)	881	
4.	Office Assistant-III/ Data Entry Operator	245	
5.	Assistant Store Keeper	11	
Total		**1298**	

The Petitioner also submitted the actual recruitment done till date as follows:

Table 4.42: Details of recruitment carried out by the Petitioner

S. No.	Year	Post	No. of Vacancies	No. of Candidates Selected	No. of Candidates Joined
1.	2018-19	Office Assistant – III	77	67	34
2.		Junior Engineer (Civil)	06	06	05
3.	2019-20	Draughtman	19	09	07
4.		Assistant Accountant	40	39	36

The Commission from the submissions made by the Petitioner observed that though the Petitioner has projected Gn for FY 2020-21 as 33%, permission from GoU to fill the vacant post was awaited and, therefore, the Commission during the Technical Validation Session asked UPCL to submit the realistic employee addition for FY 2020-21. UPCL vide its reply dated Februray 05, 2020 submitted that it has already submitted the status of recruitment, however, it added that the same is subject to the approval of GoU and the Courts.

The Commission observes that the Petitioner has submitted GoU's approval to fill 105 vacant posts. The Commission has assumed that the recruitment against the same shall be completed in FY 2020-21. With regards to the vacant posts for which approval is still awaited, the Commission at this stage has not considered any addition on account of the same. The Commission has considered addition of 43 employees in FY 2019-20 as submitted by the Petitioner. Against the same, the number of employees retiring during FY 2019-20 and FY 2020-21 has been considered as 99 and 135 respectively. Thus, the Gn factors based on the recruitment and retirement details submitted by the Petitioner works out to 0.00% for FY 2019-20 and FY 2020-21. However, if the actual addition to the number of employees varies with the number of employee addition considered in this Order, the impact of the same shall be adjusted while carrying out the truing up and any saving on this account shall not be considered in sharing of gains.

In accordance with UERC Tariff Regulations, 2018, CPI inflation which is the average increase in the Consumer Price Index (CPI) for the preceding three years, is to be considered. The Commission has calculated the annual growth in values of CPI (overall) based on the average of preceding three full years upto FY 2018-19 as 4.22%.

The Commission has considered the gross normative employee expenses approved in the true up for FY 2018-19 for projecting the employee expense for FY 2020-21 in accordance with the UERC Tariff Regulations, 2018. Further, the Commission has considered the capitalisation rate of employee expenses as 18.52% based on the actual rate of capitalisation for FY 2018-19.

With regards to the impact of VII Pay Commission, the Commission vide its letter dated February 20, 2020 with regards to the claim of Rs. 29.19 Crore asked the Pettioner to justify its claim as the amount also included arrears paid for the period July 2016 to December 2016. The Petitioner in its reply submitted that the Commission in order to compensate for the increase in pay on account of implementation of VII Pay Commission allowed a tentative impact of 15% on the actual employee expenses of FY 2017-18 and FY 2018-19 to approve the Employee Expenses for the 3rd Control Period. It further submitted that 15% impact as per the Commission would have covered the increase in the pay on account of implementation of VII Pay Commission. However, in the absence of any full year wherein the actual Employee Expenses would only reflect the true employee expenses pertaining only to the increase in pay and devoid of any arrears, the Petitioner has considered the base employee expenses (excluding the impact of 7th Pay) as allowed in the true-up of FY 2017-18 and escalated the same with the inflation and growth factors y-o-y to arrive upon the Employee expenses for FY 2020-21. Subsequently, a tentative impact on account of increase in pay of Rs 29.19 Crore has been added. The Petitioner submitted that instead of considering a 15% lump-sum increase as considered by the Commission, it has considered a lump-sum amount of Rs. 29.19 Crore which corresponds to the increase on account of VII Pay Commission and is not pertaining to any kind of arrears. It further submitted that the increment in pay due to implementation of VII Pay Commission shall be considered as per actuals during the true-up.

The Commission in its MYT Order had considered the impact of Seventh Pay Commission to the tune of 15% of the approved net employee expenses. The Commission from the actual employee expenses for FY 2018-19 observed that the actuals of employee expenses as per accounts is not varying much vis-a-vis the normative employee expenses approved by the Commisison for FY 2018-19. The Commission is of the view that the actual employee expenses booked in accounts must also include revised pay scale of those employees who would have opted for VII Pay Commission. As also submitted by the Petitioner in its reply, the actual impact of revised pay cannot be ascertained at this time and, hence, the Commission has not considered the impact of VII pay Commission separately while approving the employee expenses for FY 2020-21. The Commission shall consider the same at the time of truing up of FY 2020-21.

Further, the Commission has already allowed about Rs. 58.00 Crore to the Petitioner on account of increase in salary due to VII Pay revision for FY 2019-20 which would be available with the Petitioner and the same can be utilised for any upward variation in the employee expenses. T**he Petitioner is directed to maintain separate details of the amount paid as arrears to its employees on account of implementation of the recommendations of VII Pay Commission.** The Commission would carry out the truing up for FY 2020-21 based on the actual impact of VII Pay Commission including arrears and no sharing of gains and losses on this account would be allowed. The normative employee expenses approved by the Commission for FY 2020-21 are as shown in the Table below:

Table 4.43: Employee expenses approved by the Commission for the second Control Period for FY 2020-21 (Rs. Crore)

Particulars	FY 2020-21	
	Claimed by UPCL	Approved
EMPn-1*	382.26	382.50
Gn	33%	0.00%
CPIinflation	4.21%	4.22%
EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)	**529.73**	**398.63**
Capitalisation rate	17.21%	18.52%
Less: Employee expenses capitalised	91.15	73.82
Net Employee expenses	**438.57**	**324.81**
Impact of VII Pay Revision	**29.19**	**-**
Total Employee Expenses	**467.76**	**324.81**

4.10.2.2R&M expenses

The Commission has approved the R&M expenses of Rs. 161.69 Crore for FY 2020-21 in its MYT Order dated February 27, 2019. As against the same, the Petitioner has computed the R&M expenses for FY 2020-21 as Rs. 203.26 Crore.

The Petitioner submitted that the R&M expenses for FY 2020-21 has been proposed as per the UERC Tariff Regulations, 2018. The Petitioner has considered the K factor of 3.06% as approved by the Commission in its MYT Order dated February 27, 2019. Further, the Petitioner has considered the WPI inflation of 2.33% considering the average increase in the Wholesale Price Index (WPI) for FY 2016-17 to FY 2018-19. Accordingly, the Petitioner has proposed the R&M expenses of Rs. 203.26 Crore for FY 2020-21.

The Commission has determined the R&M expenses for FY 2020-21 in accordance with UERC Tariff Regulations, 2018. The Commission has considered same K factor of 3.06% as considered by it in its MYT Order dated February 27, 2019. The Commission for computation of R&M expenses has considered the opening GFA for FY 2020-21. The Commission has further considered the WPI inflation of 2.98% which is the average increase in the Wholesale Price Index (WPI) for FY 2016-17 to FY 2018-19.

The R&M expenses approved by the Commission for FY 2020-21 is as shown in the Table below:

Table 4.44: R&M Expenses approved by the Commission for FY 2020-21
(Rs. Crore)

Particulars	Claimed by UPCL	Approved
K	3.06%	3.06%
GFAn-1	6491.21	5549.79
WPIinflation	2.33%	2.98%
R&Mn = K x (GFAn-1) x (1+WPIinflation)	**203.26**	**175.10**

4.10.2.3A&G Expenses

The Commission had approved the A&G expenses of Rs. 36.61 Crore for FY 2020-21 in its MYT Order dated February 27, 2019. As against the same, the Petitioner has computed the A&G expenses for FY 2020-21 as Rs. 72.58 Crore as per the UERC Tariff Regulations, 2018.

The Petitioner submitted that the A&G expenses for FY 2020-21 consists of three main components comprising of existing expenses, new initiatives and provisions. The Petitioner submitted that it has computed A&G Expenses in line with the methodology adopted by the Commission. Accordingly, the estimated A&G expenses for FY 2018-19 has been considered as 'A&Gn-1'. The 'A&Gn-1' has then been escalated by WPI inflation of 2.33% p.a. (which is the average increase in WPI for the immediately preceding two-year period between FY 2016-17 to FY 2018-19) to arrive at the expenses for FY 2020-21.

Further, the Petitioner submitted that in addition to the normative A&G expenses there are few new expenses which are not included in the expenditure of base year and shall be incurred for the first time. These expenses are primarily towards cost of data centre and other new initiatives being implemented by the Petitioner in the current/ subsequent years. Therefore, the Petitioner has proposed an additional 'Provision' needed for activities that shall be introduced during the third Control Period such as mobile based billing, ERP implementation etc. under the R-APDRP scheme. These additional expenses are being proposed over and above the recurring cost already being incurred against facility management system, AMC of hardware, licence renewal, bandwidth charges in the previous years.

The Petitioner submitted that since the new initiatives were not implemented in FY 2018-19, the Petitioner has considered the revised Gross A&G for FY 2018-19 and has, accordingly, determined the Normative Gross A&G expenses for FY 2019-20 and FY 2020-21 in line with the Commission's prescribed methodology. The Petitioner further submitted that additional expenditure of Rs. 46.23 Crore shall be incurred towards data centre and other new initiatives.

The Petitioner submitted that in addition to the above-mentioned cost, the Petitioner has implemented Android based billing from FY 2018-19 in view of high manpower requirement in meter and billing related activities. The Android based billing is being implemented for all categories of consumers except the high value consumers across the State of Uttarakhand. The Petitioner submitted that the system would not only help in reducing the overall cost associated with metering and billing activities but also increase the accuracy in meter reading, regularize the process for meter reading and better management of manpower to other activities. Since, the cost associated with this scheme has only been initiated from FY 2018-19, the same is not included in the base year A&G cost. The Petitioner has further claimed Licence Fees of Rs. 3.25 Crore as paid for FY 2018-19.

The list of such expenses to be incurred as submitted by the Petitioner is shown in the Table below.

Table 4.45: Additonal Provisioning for Data Centre (Rs. Crore)

S. No.	Name of the Work/Agency	Work Description	FY 2020-21
1.	FMS cost of ITIA	FMS Cost of ITIA for all the IT hardware, software and network installed at DC/DR/CCC and field offices under RAPDRP and IPDS	3.13
2.	Diesel bills	Diesel Consumption Bills for DG Set at DC & DR	0.01
3.	GIS Software support	ATS Cost for GIS software of ESRI	1.32
4.	DC & DR AMC for civil infra	AMC for Infrastructure at DC	1.50
5.	M/s Fluent grid (Tech. Support Service)	Manpower Cost	1.00
6.	DC IT Hardware AMC	AMC for IT Hardware	0.25
7.	IBM Software License Renewal	ATS Cost for IBM suite	0.93
8.	Cyber Security Audit	Cyber Security Audit of DC & DR infra	0.07
9.	DR IT Hardware AMC	AMC for IT Hardware	1.25
10.	M/s Fluent grid (ATS)	ATS Cost for M-Power Suite (MBC & other CA Application)	0.68
11.	ATS for NA & MDM	ATS Cost for NA and MDM modules	0.42
12.	Replacement & Upgradation of End of Life IT Hardware at DC & DR	Replacement & Upgradation of End of Life IT Hardware at DC & DR after Yr. 2020	7.20
13.	Antivirus	Antivirus license renewal	0.28
14.	Red Hat and other software licenses	Software ATS	1.32
Communication system of UPCL			
1.	Bandwidth PRI Lines & Toll free	Telephone/GPRS/SMS	0.36
2.	Expenditure on MPLS (BSNL, Airtel)	Network Connectivity for Offices & SCADA	3.52
3.	Expenditure on Internet Leased Line (Vodafone, PGCIL, BSNL)	Internet Connectivity	0.24
4.	SIM SMS charges for modems	SIM SMS charges for meter modems	0.14
5.	SMS Broadcast Charges	SMS Gateway Charges	0.54
Operational/Commercial activities handled by IT			
1.	M/s TDS Pvt Ltd (Mobile based billing)	Mobile Billing as O&M expense	10.40
2.	Consumer AMR Capital Expenditure by M/s Allied	AMR setup for KCC/Open access consumers and DSM interface points	1.51
3.	Consumer AMR annual operational expenditure by M/s Allied	O&M for AMR of KCC/Open access consumers and DSM interface points	1.70

Table 4.45: Additonal Provisioning for Data Centre (Rs. Crore)

S. No.	Name of the Work/Agency	Work Description	FY 2020-21
4.	M/s Cy Future (IT Operation)	IT Operations Engineers Cost	1.50
5.	Customer Service Centre expenses	CSC Manpower Cost	1.39
Miscellaneous IT and related works			
1.	Insurance for DC/DR/SCADA	MISC Exp for Insurance	0.02
2.	Video Conferencing Setup	VC Setup for UPCL HQ and Field offices	1.00
3.	Petty IT works	Misc. IT Expense, LAN/WAN work etc.	0.40
4.	Other professional charges	Misc. Operational (F&A)	0.01
5.	M/s Wipro for ERP Consultancy	ERP Consultancy & PMA Charges	0.41
6.	Website upgradation	Addition of chatbot, online recharge and website maintenance activity	0.30
SCADA			
1.	AMC of SCADA IT hardware		0.19
2.	AMC of SCADA field equipment (RTU/FRTU/DCPS)		0.84
3.	FMS of SCADA/DMS		0.80
4.	M/s Siemens Ltd	Manpower Cost for SCADA Operations	1.62
	Total		**46.23**

Accordingly, the Petitioner has proposed the A&G expenses of Rs. 72.58 Crore for FY 2020-21.

The Commission has considered the normative gross A&G expenses approved in the true up of FY 2018-19 as the gross base A&G expenses. This normative opening gross A&G expenses has been escalated by the WPI inflation of 2.98% to arrive at A&G expenses for FY 2019-20. The gross A&G expenses so arrived at have been considered as the gross A&G expenses (A&Gn-1) for FY 2020-21. Further, the Commission has considered the actual capitalisation rate of A&G expenses for FY 2018-19 to be the capitalisation rate for FY 2020-21. In addition, the Commission has considered the license fee as Rs. 3.30 Crore for FY 2020-21.

As regards the additional provisioning toward the new expenses proposed during each year of the Control Period towards the data centre, the Commission agrees with the Petitioner that these expenses were not incurred in previous Control Period and hence, provisioning of these expenses needs to be allowed in addition to the A&G expenses approved based on previous years A&G expenses. However, from the details submitted by the Petitioner it was observed that the Petitioner has claimed AMC costs in A&G expenses which should have been a part of R&M expenses. The

Commisison has, therefore, not considered such costs while approving the A&G expenses for FY 2020-21. The Commission further observed that the Petitioner has also booked cost towards replacement and upgradation of end of life IT Hardware amounting to Rs. 7.20 Crore. The Commission in TVS sought justification for claiming capital works as part of A&G expenses. The Petitioner vide its reply dated February 05, 2020 submitted that it shall capitalise the same in the books of accounts. The Commission has, therefore, not considered the same as part of A&G expenses. However, the Commission would like to clarify that the actual expenses towards provisioning of such costs shall be considered upon truing up subject to prudence check and any expense found unreasonable or unwarranted may be disallowed and any savings in provisioning of these costs shall not be considerd towards sharing of gains. **Moreover, the Petitioner is directed to properly account for these provisions in appropriate heads of accounts.**

The normative A&G expenses approved by the Commission for FY 2020-21 is as shown in the Table below:

Table 4.46: A&G expenses approved by the Commission for FY 2020-21 (Rs. Crore)

Particulars	Claimed	Allowable
A&Gn-1	29.81	29.46
WPIinflation	2.33%	2.98%
Gross A&G expenses	30.50	30.34
Capitalisation rate	24.26%	35.48%
Less: A&G expenses capitalized	7.40	10.76
Net A&G expenses	23.10	19.58
Provision (Data Centre)	46.23	31.40
License Fee	3.25	3.30
Total A&G Expenses	**72.58**	**54.28**

4.10.2.4O&M Expenses

The summary of O&M expenses approved by the Commission for FY 2020-21 is as shown in the Table below:

Table 4.47: O&M Expenses approved by the Commission for FY 2020-21 (Rs. Crore)

Particulars	FY 2020-21	
	Claimed by UPCL	Approved
Employee expenses	467.76	324.81
R&M expenses	203.26	175.10
A&G expenses	72.58	54.28
Total O&M expenses	**743.61**	**554.19**

4.10.3 *Interest on Working Capital*

The Petitioner has submitted that the interest on working capital (IWC) for FY 2020-21 has been proposed in accordance with the UERC Tariff Regulations, 2018. Accordingly, the Petitioner has proposed the IWC of Rs. 16.13 Crore for FY 2020-21.

Regulation 33(2) of the UERC Tariff Regulations, 2018 specifies as follows:

*"(2) **Distribution***

a) The Distribution Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:

(i) Operation and maintenance expenses for one month;

(ii) Maintenance spares @ 15% of operation and maintenance expenses; plus

(iii) Two months equivalent of the expected revenue from sale of electricity at prevailing tariffs;

(iv) Capital required to finance such shortfall in collection of current dues as may be allowed by the Commission; minus

(v) Amount held as security deposits under clause (a) and clause (b) of sub-section (1) of Section 47 of the Act from consumers and Distribution System Users; minus

(vi) One month equivalent of cost of power purchased, based on the annual power procurement plan."

The Commission has determined the interest on working capital for FY 2020-21 in accordance with the UERC Tariff Regulations, 2018.

4.10.3.1One Month O&M Expenses

The annual O&M expenses approved by the Commission are Rs. 554.19 Crore for FY 2020-21. Based on the approved O&M expenses, one month's O&M expenses work out to Rs. 46.18 Crore for FY 2020-21.

4.10.3.2Maintenance Spares

The Commission has considered the maintenance spares as 15% of annual O&M expenses in accordance with UERC Tariff Regulations, 2018, which works out to Rs. 83.13 Crore for FY 2020-21.

4.10.3.3Receivables

The Commission has approved the receivables for two months equivalent to the expected revenue from the sale of electricity at the net revenue requirement of Rs. 6957.12 Crore for FY 2020-21, which works out to Rs. 1159.52 Crore for FY 2020-21.

4.10.3.4Capital required to finance shortfall in collection of current dues

The Petitioner has claimed Rs. 72.25 Crore towards the capital required to finance the shortfall in collection of current dues for FY 2020-21.

The Commission has approved the collection efficiency of 99.10% for FY 2020-21 while approving the Business Plan of UPCL for FY 2020-21. In accordance with the provisions of the UERC Tariff Regulations, 2018 the Commission has approved the capital required to finance shortfall in collection of current dues as 0.90% of the net revenue required which work out Rs. 62.61 Crore.

4.10.3.5Adjustment for security deposits and credit by power suppliers

The Petitioner has proposed the amount held as security deposit as Rs. 934.33 Crore and one month of power purchase cost as Rs. 531.63 Crore totalling to Rs. 1465.96 Crore for FY 2020-21. Considering the same amount of security deposit as proposed by the Petitioner and estimating one month of power purchase cost as Rs. 459.15 Crore, the Commission has approved the total amount of Rs. 1393.66 Crore for FY 2020-21 as the amount held as security deposits and credit by power suppliers.

Based on the above, the total working capital requirement of the Petitioner for FY 2020-21, works out to Rs. -42.22 Crore. As the total working capital requirement estimated for FY 2020-21 is negative, the interest on working capital works out to Rs. 0.00 Crore for FY 2020-21. The interest on working capital for FY 2020-21 approved by the Commission is as shown in the Table below:

Table 4.48: Interest on working capital approved by the Commission for FY 2020-21 (Rs. Crore)

Particulars	Claimed by UPCL	Approved
O&M expenses for 1 month	61.97	46.18
Maintenance Spares	111.54	83.13
2 months of expected revenue at prevailing tariffs	1337.96	1159.52
Capital required to finance shortfall in collection of current dues	72.25	62.61
Minus: Amount held as security deposits and credit by power suppliers	1465.96	1393.66
Net Working Capital	**117.76**	**-42.22**
Rate of Interest on Working Capital	13.70%	13.70%
Interest on Working Capital	**16.13**	**0.00**

4.10.4 *Return on Equity*

The Petitioner has considered the opening Equity for FY 2020-21 as Rs. 831.29 Crore. The Petitioner has considered the equity addition during the year as per the proposed financing plan for the year. The Petitioner has proposed the Return on Equity at the rate of 16.50% on the average equity for the year. Accordingly, the Petitioner has proposed the Return on Equity of Rs. 153.25 Crore for FY 2020-21.

Regarding the Return on Equity, Regulation 26 of the UERC Tariff Regulations, 2018 specifies as follows:

*"**26. Return on Equity***

(1) Return on equity shall be computed on the equity base determined in accordance with Regulation 24.

Provided that, Return on Equity shall be allowed on account of allowed equity capital for the assets put to use at the commencement of each financial year.

(2) Return on equity shall be computed on at the base rate of 15.50% for thermal generating stations, transmission licensee, SLDC and run of river hydro generating station and at the base rate of 16.50% for the storage type hydro generating stations and run of river generating station with pondage and distribution licensee on a post-tax basis."

In accordance with the UERC Tariff Regulations, 2018, Return on Equity is allowable on the opening equity for the year. Hence, the Commission has determined the Return on Equity considering the eligible opening equity for return purposes for FY 2020-21.

The Commission has considered the closing eligible equity for return purposes approved for FY 2018-19 as the opening balance for FY 2019-20. Thereafter, the Commission has considered the equity addition during FY 2019-20 as per the approved means of finance for FY 2019-20. The Commission has considered the closing balance for FY 2019-20 as the opening balance for FY 2020-21.

The Return on Equity approved by the Commission for FY 2020-21 is as shown in the Table below:

Table 4.49: Return on Equity approved by the Commission for FY 2020-21
(Rs. Crore)

Particulars	Claimed by UPCL	Approved
Opening Equity	831.29	694.22
Addition during the year	195.00	118.65
Closing Equity	1026.29	812.87
Rate of Return	16.50%	16.50%
Return on Equity	153.25	**114.55**

4.10.5 *Income Tax*

The Petitioner has not claimed any Income Tax in its ARR proposals for FY 2020-21.

Regulation 34 of the UERC Tariff Regulations, 2018 specifies as follows:

"***34. Tax on Income***

Income Tax, if any, on the income stream of the regulated business of Generating Companies, Transmission Licensees, Distribution Licensees and SLDC shall be reimbursed to the Generating Companies, Transmission Licensees, Distribution Licensees and SLDC as per actual income tax paid, based on the documentary evidence submitted at the time of truing up of each year of the Control Period, subject to prudence check."

As stated above, Income Tax is admissible at the time of truing up and, hence, the Commission has not considered any Income Tax in the approval of ARR for FY 2020-21.

4.10.6 *Provision for Bad and doubtful debts*

Regulation 31 of the UERC Tariff Regulations, 2018 specifies as follows:

"***31. Bad and doubtful debts***

(1) The Commission may allow a provision for bad and doubtful debts upto one percent (1%) of the estimated annual revenue of the distribution licensee, subject to actual writing off bad debts by it in the previous years.

Provided further that where the total amount of such provisioning allowed in previous years for bad and doubtful debts exceeds five (5) per cent of the receivables at the beginning of the year, no such appropriation shall be allowed which would have the effect of increasing the provisioning beyond the said maximum."

The Petitioner submitted that the Commission has not been approving any additional write-off during the truing-up of recent years. In the Tariff Order for FY 2018-19 under Clause 3.3.3 Provisions for Bad and Doubtful Debts, the Commission had stated the following:

"The Commission has already allowed the Petitioner a total provision of Rs. 333.75 Crore till FY 2008-09 which also includes the opening balance of the provision inherited from UPPCL. Even considering the actual write off debt of Rs. 230.44 Crore till FY 2016-17, the Petitioner is still left with a provision of about Rs. 103.31 Crore. The closing debtors of UPCL as on 31.03.2016 were to the tune of Rs. 1,789.05 Crore as per the Commercial Diary of UPCL. Hence, the provision available with UPCL is to the extent of 5.77% for FY 2016-17 of the existing debtors and any additional provision is not allowable in accordance with the Regulations as referred above."

The Petitioner requested the Commission to allow 1% of the ARR towards provision for Bad and Doubtful Debts during the third Control Period in accordance with Regulation 31 of the MYT Regulations, 2018.

The Commission as discussed in Chapter 3 of the Order has not allowed any amount towards provision of bad and doubtful debts while carrying out the truing up for FY 2018-19 for reasons stated therein. Since the Petitioner has not complied with the directions of the Commission with regards to the auditing of the receivables and reconciliation of consumer wise dues, accordingly, the Commission has not considered the provision for bad and doubtful debts in the approval of ARR for FY 2020-21.

4.10.7 *Non-Tariff Income*

The Petitioner has proposed non-tariff income of Rs. 244.41 Crore for FY 2020-21 same as that earned in FY 2018-19. In the absence of any yardstick for estimating the non-tariff income of the

Petitioner, the Commission provisionally accepts the same for FY 2020-21. The same shall, however, be Trued up based on the actual audited accounts for the year.

4.10.8 *Revenue Requirement for FY 2020-21*

Based on the above, the net Revenue Requirement approved by the Commission for FY 2020-21 is as shown in the Table below:

Table 4.50: Revenue Requirement approved by the Commission for FY 2020-21
(Rs. Crore)

Particulars	Claimed by UPCL	Approved
Power Purchase Cost including RPO	5330.64	5252.57
Water Tax	260.06	260.06
UJVN Ltd. Arrears/(Surplus)		29.02
Transmission Charges		
PGCIL	373.37	429.89
PTCUL and SLDC Charges	415.45	286.49
Interest on Loan & Consumer Security Deposit	195.43	137.46
Depreciation	201.30	167.47
O&M expenses	743.61	554.19
Interest on Working Capital	16.13	0.00
Return on Equity	153.25	114.55
Provision for Bad and doubtful debts	0.00	
Aggregate Revenue Requirement	**7689.24**	**7231.69**
Less: Non-Tariff Income	244.41	244.41
True up impact GAP/(SURPLUS)	153.24	(30.16)
Net Revenue Requirement	**7598.08**	**6957.12**

4.10.9 *Revenue at Existing Tariff*

The Petitioner has projected the revenue of Rs. 7062.37 Crore for FY 2020-21 at the existing Tariff. The Petitioner has projected the category-wise revenue for FY 2020-21 based on the existing fixed and energy charges approved by the Commission in its Tariff Order dated February 27, 2019 and additional energy charge (AEC) approved by the Commission in Order dated October 25, 2019 for each category.

It is observed that the Petitioner has computed revenue at existing tariff considering the AEC approved by the Commission, though the same was allowed as an interim increase to recover the additional power purchase for FY 2018-19 and was effective till March 31, 2020. The Commission is of the view that the same is not the correct approach as the purpose of introducing AEC was temporary and, therefore, cannot be assumed to be the existing tariff. The Commission has, therefore, considered the tariff approved in the MYT Order dated February 27, 2019 excluding the AEC approved vide Order dated October 25, 2019 for estimating the total consumer category wise revenue for FY 2020-21 as Rs. 6751 Crore.

The revenue at existing Tariff as proposed by the Petitioner and estimated by the Commission is shown in the Table given below:

Table 4.51: Revenue for FY 2020-21 at existing Tariff (Rs. Crore)

S. No.	Consumer Category	Proposed by the Petitioner			Estimated by the Commission		
		Sales (MU)	Revenue (Rs. Crore)	Average Billing Rate (Rs./kWh)	Sales (MU)	Revenue (Rs. Crore)	Average Billing Rate (Rs./kWh)
1.	RTS-1: Domestic	3077.39	1362.05	4.43	3123.11	1319.72	4.23
2.	RTS-2: Non-Domestic	1435.19	923.26	6.43	1413.41	872.72	6.17
3.	RTS-3: Govt Public Utilities	675.62	402.24	5.95	643.23	368.14	5.72
4.	RTS-4: Private Tube Wells	197.81	40.29	2.04	196.91	38.40	1.95
7.	RTS-5: Industry	6956.72	4213.49	6.06	6950.17	4017.17	5.78
	LT Industry	323.46	192.87	5.96	317.13	181.70	5.73
	HT Industry	6633.26	4020.62	6.06	6633.04	3835.47	5.78
8.	RTS-6: Mixed Load	184.93	103.28	5.58	183.55	98.26	5.35
9.	RTS-7: Railway Traction	29.04	17.74	6.11	29.27	16.96	5.80
	Revenue from Incremental Sales				36.56	19.63	5.37
Total		**12556.69**	**7062.37**	**5.62**	**12576.21**	**6751.00**	**5.37**

4.10.10 *Revenue Gap for FY 2020-21 at existing Tariff*

Based on the net revenue requirement of Rs. 7598.08 Crore (including the proposed True up amount for FY 2018-19) and revenue at existing Tariff of Rs. 7062.37 Crore, the Petitioner has proposed the revenue gap of Rs. 535.71 Crore to be recovered by way of proposed Tariff for FY 2020-21.

Considering the net revenue requirement of Rs. 6957.12 Crore and revenue at existing Tariff of Rs. 6751 Crore, the Commission has approved the revenue gap of Rs. 206.12 Crore for FY 2020-21. The revenue gap for FY 2020-21 proposed by the Petitioner and approved by the Commission is as shown in the Table given below:

Table 4.52: Revenue Gap for FY 2020-21 (Rs. Crore)

Particulars	Proposed by the Petitioner	Approved
Net Revenue Requirement	7598.08	6957.12
Revenue at existing Tariff	7062.37	6751.00
Revenue Gap	535.71	206.12

5. Tariff Rationalisation, Tariff Design and Related Issues

5.1 Tariff Rationalisation and Tariff Design for FY 2020-21

5.1.1 *General*

In Chapter 4 of this Order, it has been concluded that the revenue projected to be earned by UPCL during FY 2020-21 at tariffs approved vide Tariff Order dated 27.02.2019 will be Rs. 6751 Crore. Against this, the ARR approved by the Commission for FY 2020-21 including gap and surplus on account of truing up of previous years works out to Rs. 6957.12 Crore, leaving a total gap of Rs. 206.12 Crore.

In view of the objections received and the Petitioner's submissions, the Commission considers it appropriate to first take a view on the tariff rationalisation measures proposed by the Petitioner and the concerns voiced by other stakeholders.

5.1.2 *Petitioner's Proposals*

The Petitioner submitted that the tariff proposal has been formulated with an attempt to keep the impact on the consumers to the minimum possible extent and at the same time not defer a large portion of recovery of the tariff for the coming years. The Petitioner further submitted that Section 61(g) of the Electricity Act, 2003 states that the appropriate Commission should be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

The Petitioner also proposed the following amendment in the Tariff structure for FY 2020-21:

5.1.2.1 Reduction in Number of Slabs for Domestic Category

The Petitioner submitted that as per the current tariff structure, there are four slabs under domestic category. The Petitioner in its Petition porposed to reduce the number of slabs under Domestic category to two slabs, i.e. 0-100 kWh and above 100 kWh with same fixed charges.

5.1.2.2 Merger of Independent Advertisemnt Hoardings with Non-Domestic

The Petitioner submitted that as per the current tariff structure, Independent Advertisement Hoardings is a separate sub-cateogry under the Non-Domestic Category. The Petitioner proposed to merge the sub-category Independent Advertisement Hoardings under Non-Domestic sub-category of load upto 25 kW.

5.1.2.3 Introduction of New Category for Electric Vehicles Charging System

The Petitioner introduced a new category RTS-8 for Electric Vehicles Charging System in accordance with the direction of GoU with single part tariff at the Average Cost of Supply. The Petitioner further sumitted that in the absence of data, no revenue has been considered from the same.

5.1.2.4 Abolition of Grace Period for Delayed Payment Surcharge

The Petitioner submitted that as per the current tariff structure, 15 days grace period is available for making the payments beyond the Due Date and Delayed Payment Surcharge is levied after the Grace Period.

The Petitioner further submitted that on the representation of the consumers regarding delay in delivery of electricity bills by the Petitioner, the Commission in its Tariff Order dated 12.07.2006 ordered that till such time UPCL was able to streamline its bill preparation and distribution system to the Commission's satisfaction, grace period of 15 days beyond the last date of payment printed on the bill would be available to all the consumers without any Delayed Payment Surcharge.

The Petitioner further submitted that it has improved its billing and distribution system tremendously, the details of which are as follows:

a. At the time of passing of the order the by the Commission allowing the grace period, the entire billing of the Petitioner was outsourced to the agencies situated in Meerut & New Delhi. Now the entire billing is being done in-house, and the billing system has been established at Corporate Office.

b. For almost all domestic consumers having load upto 25 kW, billing is either being done through Spot Billing Machine (SBM) or through mobile based billing, where on the spot delivery of bills is provided after the generation of the bills at the site. Hence, there is no delay in delivering the bills.

c. For system generated bills of other categories (key consumers), bills are generated through Petitioner's software and instant sms is sent to the consumers upon generation of the bills. These bills are also made available on the website of the Petitioner from where consumers can download their own bills. Bills are also delivered through e-mail and in hard copy to these consumers.

The Petitioner, accordingly, requested the Commisson to abolish the grace period considering the improvement in the billing and bill distribution system and to provide in the Rate Schedule that the Delayed Payment Surcharge shall be levied after the due date of the bill.

5.1.2.5 Prepaid metering

The Petitioner proposed certain amendments to the Tariff proposal for prepaid metering. The salient features of Prepaid Metering proposed by Petitioner are as follows:

1. The option of Pre-paid metering shall be available to all categories of consumers upto 25 kW load under LT category. Prepaid Metering shall be mandatory for new Temporary LT connections, for Advertisements/Hoardings and for Government connections upto 25 kW.

   Provided that the option of prepaid metering shall not be available to the Seasonal industries covered under Rate Schedule RTS-5.
2. There shall be a minimum recharge of Rs. 100 and the maximum limit of recharge shall be Rs. 15,000 for both single phase and three phase connections. Validity of the recharge shall continue till the amount is available in the account of the consumer. Any recharge shall be allowed only when the 20 digit special meter reading code is made available by the consumer.
3. As regards the charges for testing of meter, the Petitioner shall recover the amount as approved by the Commission under Schedule of Miscellaneous Charges directly from such prepaid consumers as is done for postpaid consumers and shall not be charged from the recharge amount.
4. In case, the consumer opting for Prepaid Metering have outstanding arrears, the Petitioner shall adjust 20% of the past arrears or 50% of the recharge amount, whichever is higher from the recharge voucher, subject to the maximum of the outstanding arrears. Further, the maximum limit of recharge as mentioned above, shall not be applicable in

case of consumers having outstanding arrears and, accordingly, such consumers having past arrears will have to take minimum recharge of more than 20% of the outstanding arrears.

5. The Petitioner shall make necessary provisions to provide friendly credit hours/limit to the consumers, in order to ensure uninterrupted supply to the consumers in the event of expiry of the balance during non-working hours, i.e. night time or during holiday, so as to provide reasonable time to the consumer to procure the recharge voucher at the next possible working hours or working day. However, the charges for the electricity consumed between the expiry of the balance during non-working hours and subsequent recharge voucher shall be adjusted from the recharge voucher.
6. All the Prepaid meters will be provided with an alarm to indicate low credit.
7. As per the guiding principles and Section 47(5) of the Electricity Act, 2003, the Petitioner shall not charge any security deposit as is required in post-paid connections but price equivalent to the material cost, i.e. cost of meter and associated equipment shall be charged as material security which shall be returned after adjusting for the depreciation at the time of permanent disconnection. The material security deposit (except for BPL domestic consumers) for FY 2020-21 shall be Rs. 5000/- for single phase connection and Rs 10,000/- for three phase connection. BPL domestic consumers shall be exempted from payment of material security deposit.
8. The consumer shall be allowed only one transfer from postpaid to prepaid or otherwise in a financial year.
9. Voltage rebate/surcharge, low power factor surcharge and excess load penalty shall not be applicable for prepaid connections.
10. A rebate of 4% of Energy Charges for Domestic Category and 3% of Energy Charges for other categories shall be applicable as per tariff schedule for the consumers availing this scheme and the rebate shall only be applicable after installation and operationalization of Prepaid meters.

    Provided that no rebate shall be applicable on (i) of Para 1 of RTS-8, i.e. Temporary Supply for Illumination/Public Address/ceremonies and festivities/functions/ temporary shops not exceeding 3 months.

Provided further that the fixed charge in respect of other domestic consumers [(1.2) of para 2 of RTS-1] shall be Rs. 75/kW/month.

Provided further that the energy charge in respect of BPL/lifeline domestic consumers shall be as follows:

Table 5.1: Tariff Proposed for BPL/Lifeline Consumers opting for Prepaid Metering

Upto 60 units per month	Rs. 1.90/kWh
61 - 100 units per month	Rs. 3.26/kWh
Above 100 units per month	Rs. 5.25/kWh

Provided further that in case consumers covered under para 2(1.2) (a) of Rate Schedule RTS – 2 consumes more than 50 units in a month, the energy charge for first 50 units shall be Rs. 4.85/kWh and the remaining units shall be charged at the energy charge as specified for consumers covered under para 2(1.2) (b) of Rate Schedule RTS – 2.

Provided further that Gaushalas/Gausadans having load upto 2 kW covered under Rate Schedule RTS -1 shall be charged at the rates as specified in Rate Schedule RTS – 1 irrespective of their monthly consumption.

Provided further that consumers having contracted load upto 2 kW and consumption upto 200 kWh per month and who are using some portion of the premises for non-domestic purposes covered under Rate Schedule RTS-1 shall be charged at the rates as specified in Rate Schedule RTS- 2.

11. The solar water heater rebate shall be adjusted as follows:-
    a. The rebate for first month of implementation of prepaid metering scheme shall be credited immediately on the first recharge. Thereafter, rebate shall be credited on monthly basis if recharge is done every month.
    b. In case recharge is not being done on monthly basis, then based on the capacity of Solar Water Heater installed by the consumer, solar water heater rebate would be credited for all the past months for which the rebate was due either at the time of recharge or when the consumer approaches UPCL.

5.1.2.6 Miscellaneous Charges

The Petitioner vide its letter dated March 12, 2020 has also proposed revision in miscellaneous charges pertaining to testing and installation of meters.

5.1.3 *Commission's Views on Tariff Rationalisation Measures*

The Commission believes that tariff rationalisation is a dynamic and ongoing process and is essential to accommodate the socio-economic and technological changes taking place in the system over a period of time.

The following Sections discuss the tariff rationalisation measures suggested by the Petitioner, Respondents, and the Commission's views on the same.

5.1.3.1 Reduction in Number of Slabs for Domestic Category

The Petitioner has proposed to reduce the existing 4 slabs to 2 slabs for Domestic Cateogry without analysing the impact of tariff shock on various domestic consumers. The Commission carried out the analysis of reducing 4 slabs to 2 slabs as proposed by the Petitioner and observed that it will create huge tariff shock to the consumers having consumption between 100 to 200 units per month and also for consumers having consumption between 200-400 units per month. The Commission is of the view that any tariff rationalisation needs to be done in a manner which does not create tariff shock for any group of consumers. Hence, the Commission has decided to continue with the existing four slabs in domestic category.

5.1.3.2 Merger of Independent Advertisemnt Hoardings with Non-Domestic

The Petitioner has proposed to merge the sub-category of Independent Advertisement Hoardings under Non- Domestic sub-category having load upto 25 kW. The Commission in its Tariff Order for FY 2015-16 dated April 11, 2015 considering the Petitioner's request created a separate sub-category for Independent Advertisement Hoardings under Non-Domestic Category and decided to keep the tariff for this sub-category slightly higher than the Non-Domestic Category. The Commission is of the view that the objective of creating this sub-category was to keep its tariff higher to avoid wastage of electricity. The Petitioner in its current Petition has just proposed to merge this sub-category with Non-Domestic category having load 25 kW and below without any rationale or justification. In the absence of any appropriate justification, the Commission is not inclined to accept the Petitioner's proposal of merging Independent Advertisement Hoardings under Non- Domestic sub-category having load 25 kW and below.

5.1.3.3 Introduction of New Category for Electric Vehicles Charging System

The Petitioner introduced a new category RTS-8 for Electric Vehicles Charging System in accordance with the direction of GoU with single part tariff at the Average Cost of Supply. The Commission agrees with the views of the Petitioner that considering various Government measures to promote Electric Vehicles, a separate new category needs to be created for Public Electric Vehicles Charging Stations. Hence, the Commission has decided to create a new category for Public Electric Vehicles Charging Stations and the tariff for this category has been fixed almost equivalent to the Average Cost of Supply without any component of subsidy.

The Commission would like to clarify that all category of consumers shall be allowed to charge their Electric Vehicle at their own premises and it shall not be considered as unauthorised activity under the Electricity Act, 2003, provided the load of EV does not exceed the connected / contracted load. For charging of batteries of E-Vehicles at the consumer's own presmises, the tariff shall be the same as applicable for the relevant category of connection at such premises from which the E-Vehicle is being charged. However, consumers who wish to install electric vehicle charging station in their premises for exclusive purposes, will have to take a separate connection for EV Charging Station.

The consumers shall apply to UPCL in case there is an increase of connected /contracted load on account of EV charging in their premises. UPCL shall revise the contracted load of consumer as per guidelines specified in applicable Regulations. UPCL shall take utmost efforts to upgrade its system as per the requirements of load for EV charging.

5.1.3.4 Abolition of Grace Period for Delayed Payment Surcharge

As regards time period to be provided to consumers for payment, Regulation 3.3.1 (3) of UERC (Supply Code), Regulations, 2007 specifies as follows:

> *"Delivery of electricity bill to the consumer shall be effected at least 15 days before the due date for payment of the bill."*

The Commission in its Tariff Order dated July 12, 2006 considering the representation of the consumers regarding delay in delivery of electricity bills by the Petitioner ordered that till such time that UPCL is able to streamline its bill making and distribution system to Commission's satisfaction, grace period of 15 days beyond the last date payment printed on the bill will be available to all the consumers without any Delayed Payment Surcharge.

The Petitioner in its Petition submitted that it has now improved its billing and distribution system tremendously and requested the Commission to abolish the grace period and provide in the Rate Schedule that the Delayed Payment Surcharge shall be levied after the due date of bill.

On the other hand, several consumers during the hearing represented that the bills were still not being delivered on time and hence, the grace period for payment of bill should not be abolished. During the SAC meeting, members of SAC raised similar issues that the bills are not being received on time and even the industrial consumers are not receiving bills through e-mail.

The Commission is of the view that clear 15 days time, from the delivery of bills to consumers, should be provided to the consumers for making the payment of bills. **The Commission considering the views of the Petitioner and also of the consumers, directs UPCL to ensure that the bills are delivered to consumers on time and due date for payment of bills should be specified at least 15 days from the date of delivery of bills to the consumers and not from the date of generation of bills.** UPCL shall also arrange to send the bills through email at the registered email ids of consumers and also send the notifications about the summary of bills through "SMS" at the registered mobile numbers of the consumers. However, the Commission is of the view that abolishing the grace period for all the estimated 27 Lakh consumers in FY 2020-21 at one go may not be conducive for smooth billing/collection system and UPCL may also find it difficult to implement the same, hence, considering the progress made by UPCL over the years, the Commission at this stage has decided to abolish the grace period only for HT Industries and other consumers being billed through Automatic Meter Reading (AMR) system, which would be around 11,000 in numbers and thus, would be easy for UPCL to manage these consumers who contribute about 80% of the total revenue. Hence, the Delayed Payment Surcharge for HT Industries and consumers being billed through AMR shall be applicable after the due date of payment mentioned in the bill. The Commission will again review this provision after 6 months from the date of this Order. In case substantial complaints are received from consumers about delay in delivery of bills and UPCL not adhering to the condition that the bills should be delivered at least 15 days before the due date mentioned in the bill, the Commission may again introduce the condition of grace period beyond which the Delayed Payment Surcharge shall be applicable. Based on the effective implementation of removal of grace period for consumers billed through AMR system, the Commission will take appropriate view on abolishing the grace period for remaining consumers subsequently.

5.1.3.5 Tariff Category for Gaushalas/Gausadans and Dairy Farms

The Commission in its Tariff Order for FY 2019-20 dated February 27, 2019 decided to include the Gaushalas/Gausadans having load upto 2 kW and consumption upto 200 units per month in RTS-1 Domestic Category.

Several representations have been received from consumers for increasing the threshold level of load and consumption for Gaushalas/Gausadans. Further, the Commission has also received representations for including the Dairy Farming under RTS-1 Domestic Category.

The Commission considering the requests of stakeholders has decided to include the Gaushalas/Gausadans used for shelter of cows and other stray cattles as well as Dairy Farming having load upto 4 kW and consumption upto 600 units per month in RTS-1 Domestic Category. However, the Commission is of the view that this provision should only be applicable for Gaushalas/Gausadans created for shelter of cows and other stray cattles as well as for small Dairy Farming and should not be misused. It is also clarified that in case consumption of Gaushalas/Gausadans and Dairy Farms exceed 600 units per month the same shall be billed under RTS-2 Non-domestic Category.

5.1.3.6 Fixed Charges, Minimum charges and Minimum Consumption Guarantee

It is a well-accepted economic principle that the fixed costs of the Utility should be recovered to a certain extent through fixed charges to ensure revenue stability. At the same time, the Commission recognises that if the entire fixed cost is recovered through fixed charges, then the utility shall have no incentive to be concerned about the sales and, hence, quality of supply may suffer. Historically, the recovery of fixed costs has been done through a mix of minimum charges and fixed charges. Levy of Minimum Consumption Guarantee Charges (MCG) is a way of ensuring minimum revenue to the utility from the consumers, however, if the consumption exceeds the specified units, then no MCG charges are levied on the consumers and the entire charges are recovered by the utility through energy/fixed charges.

The fixed charge component reflecting the fixed cost of providing the service to the consumer and the energy charge component reflecting the cost of energy actually consumed should ideally be taken in the two-part tariff structure.

Section 45(3) of the Electricity Act, 2003 also provides for levy of fixed charges. The relevant Section is reproduced below:

"The charges for electricity supplied by a distribution licensee may include:

(a) a fixed charge in addition to the charge for the actual electricity supplied;

..."

Further, the licensee is incurring fixed cost directly attributable to individual consumers such as meter reading, bill preparation, bill distribution and collection, which should ideally be allocated to and recovered from each consumer. One of the guiding factors mentioned in Section 61 of the Electricity Act, 2003 for specifying terms and conditions of tariffs is that the tariff has to be gradually cost reflective. Considering that levy of higher fixed charges should not impact the consumers adversely, the Commission in its Tariff Order dated March 18, 2008, introduced a nominal fixed charge for all the categories as a progression towards designing a two part tariff structure linked to the cost structure. Further, in its subsequent Tariff Orders from FY 2009-10 to FY 2019-20, considering the level of proportion of fixed costs as a percentage of total costs of UPCL and level of revenue recovery from fixed charges, the Commission had marginally increased the fixed charges for most of the categories to increase the revenue recovery from fixed charges and at the same time avoiding tariff shock to any consumer category.

The Commission in this Order has also marginally increased the fixed charges and thus, at the approved tariffs, the recovery from Fixed Charges from the consumers for FY 2020-21 is estimated to be around 15% against the total fixed cost incidence on the Petitioner of around 41% of the licencee's ARR for FY 2020-21.

5.1.3.7 Continuous Supply Surcharge

The Commission, in its Tariff Order dated October 23, 2009, had approved continuous supply surcharge @ 15% of the Energy Charge for consumers opting for supply during restricted hours (continuous). Further, all the consumers had an option to opt for continuous supply irrespective of whether they were on dedicated independent feeder or on mixed feeder. In accordance with the above provision, even if a single consumer in mixed feeder opted for continuous supply, its benefit got extended to all the consumers on that mixed feeder. This was a sort of discrimination amongst the consumers who had opted for continuous supply on mixed feeder and those who had not opted for continuous supply on mixed feeder as both enjoyed the benefit of continuous supply irrespective of the fact that they were paying any continuous supply surcharge or not. On the other hand, if the supply on the mixed feeder was required to be cut during rostering, the supply of continuous supply consumer also got unintentionally cut.

The Commission in order to rectify this anomaly had taken a view in its Tariff Order dated April 10, 2010 that the option of continuous supply should be made available only to consumers who are connected on a dedicated independent feeder or industrial feeder provided that all the industrial consumers on such feeder opt for continuous supply. The Commission was also of the view that considering the supply shortage position, this option was to be provided only to the continuous process industries requiring continuous supply due to continuous nature of their process. In this connection, the Commission would like to refer to Regulation 3(2) of UERC (Release of new HT & EHT Connections, Enhancement and Reduction of Loads) Regulations, 2008, which provides that loads for all HT consumers having continuous processes, irrespective of load applied for, shall be released through independent feeder only. The Commission in its Tariff Order dated April 10, 2010 had, therefore, decided that with effect from May 1, 2010, the option of continuous supply shall remain available only to continuous process industries operating twenty four hours a day and for seven days in a week without any weekly off. Further, this option was only to be available to continuous process industries connected through an independent feeder or industrial feeder provided that all the industrial consumers on such feeder opted for continuous supply option and for availing such an option, they were required to pay 15% extra energy charges at revised tariff with effect from May 1, 2010 or from the date of connection, whichever is later till 31st March, 2011 irrespective of actual period of continuous supply option. Further, the Commission in its Tariff Order dated April 10, 2010 also decided that the load shedding would be applicable for all the consumer categories except continuous process industries availing continuous supply option and, hence, the Commission abolished the mechanism of allowing utilisation of power upto 15% of the contracted load by industrial consumers who did not opt for continuous supply.

In its Tariff Order for FY 2011-12 dated May 24, 2011, Tariff Order for FY 2012-13 dated April 11, 2012, MYT Order dated May 06, 2013 and APR Order dated April 10, 2014 the Commission decided to continue with the same provisions for Continuous Supply as approved in its Order dated April 10, 2010.

The Commission in its ARR/Tariff Order dated April 11, 2015 after detailed deliberations on the issue after floating the in-house paper extended the option of continuous supply to non-continuous process industries in addition to the continuous process industries. The Commission in its Tariff Order dated 21.03.2018, considering the fact that the deficit in winter months had reduced as compared to the previous years, reduced the continuous supply surcharge from 15% of energy charges to 10% of energy charges. Further, the Commission in its Tariff Order for FY 2019-20 dated 27.2.2019 decided to continue with the continuous supply surcharge of 10% of energy charges.

In these tariff proceedings, the Commission has received mixed responses from various stakeholders. Some of the industries submitted that the continuous supply surcharge be reduced or abolished.

The Commission would like to clarify that the State of Uttarakhand is still facing power shortage and UPCL is procuring short term power from market to meet the demand. Even for FY 2020-21, the Commission has estimated a deficit of about 1237 MU in winter months during October to March in the requirement of UPCL which is of substantial nature. The Commission has estimated a surplus of about 489 MU during April, 2020 to September, 2020 in the requirement of UPCL for FY 2020-21 which would be banked with other States to offset the deficit during winter months. Hence, the Commission does not find any reason to abolish the continuous supply surcharge altogether as during winters UPCL is still having deficit. However, the deficit in winter months has reduced as compared to the previous years. Hence, the Commission has decided to reduce the continuous supply surcharge from 10% of energy charges to 7.5% of energy charges. The Commission will review the same once the aforesaid deficit in UPCL's requirement is wiped off.

The option of continuous supply shall only be available to continuous and non-continuous industries connected on an independent feeder or industrial feeder provided that all the industrial consumers on such feeder opt for continuous supply option. The existing non-continuous process industrial consumers opting for continuous supply shall pay 7.5% extra energy charges with effect from May 01, 2020 or in case of new consumers from the date of new connection, till March 31, 2021 irrespective of actual period of continuous supply. However, in case of re-arrangement of supply through independent feeder, the Continuous Supply Surcharge shall be applicable from the date of energisation of aforesaid independent feeder till March 31, 2021, irrespective of actual period of continuous supply option.

In this regard, the Commission would like to clarify certain key issues, pertaining to applicability conditions for existing and new continuous and non-continuous supply consumers in order to avoid any misinterpretation of the conditions, and the same are discussed as under:

- Consumers who have opted for Continuous supply shall continue to remain Continuous Supply Consumers and they need not to apply again for seeking continuous supply option. Such consumers shall pay 7.5% extra energy charges, in addition to the energy charges approved, w.e.f. April 01, 2020 till March 31, 2021. However, in case of any pending dispute with UPCL in the matter of continuous supply on certain feeders, those consumers will have to apply afresh, for availing the facility of continuous supply by April 30, 2020.
- The existing consumers who are new applicants for continuous supply of power (including those who are applying afresh as per above condition) can apply for seeking the continuous supply option at any time during the year. However, continuous supply surcharge for such existing consumers shall be applicable with effect 6 May 01, 2020 till March 31, 2021. UPCL shall provide the facility of continuous supply within 7 days from the date of application, subject to fulfilment of Conditions of Supply as mentioned in Clause 6 under Tariff Schedule of RTS-5. However, in case of re-arrangement of supply through independent feeder, UPCL shall provide the facility of continuous supply from the date of completion of work of independent feeder subject to fulfilment of Conditions of Supply and the continuous supply surcharge on such consumers shall be applicable from the date of energisation of aforesaid independent feeder till March 31, 2021, irrespective of actual period of continuous supply option.
- The existing consumers availing continuous supply option, who wish to discontinue the continuous supply option granted to them earlier, will have to communicate, in writing, to UPCL latest by April 30, 2020 and they shall continue to pay continuous supply surcharge alongwith the tariff approved in this Order till April 30, 2020. Further, in this regard, if due to withdrawal by one consumer from availing continuous supply option

on a particular feeder, the status of other continuous supply consumers in that feeder is affected, then UPCL shall inform all the affected consumers in writing, well in advance.

- UPCL shall not change the status of a continuous supply feeder to a non-continuous supply feeder.
- UPCL/PTCUL shall take up augmentation, maintenance and overhauling works on top priority, specially in the sub-stations where circuit breakers, other equipments, etc. are in dilapidated condition and, thereby, shall ensure minimisation of interruptions of the continuous supply feeders.
- UPCL/PTCUL shall carry out periodical preventive maintenance of the feeders supplying to continuous supply consumers. The licensees shall prepare preventive maintenance schedule, in consultation with continuous supply consumers, well in advance, so that such consumers can plan their operations, accordingly.
- Continuous supply surcharge shall not be applicable on power procured by industrial consumers through open access.

5.1.3.8 Tariff Categorisation for HT Industries and Load Factor based Tariff

The Commission has considered the stakeholders/industries responses and observed that some of the consumers have again raised the issue of load factor based tariff for HT Industries. Some of the stakeholders submitted that the load factor based tariff for HT Industries is discriminatory as well as against the provisions of the Act, Tariff Policy and the Commission's Tariff Regulations. Some of the stakeholders also submitted that the higher consumption needs to be promoted and discount/rebate should be provided for maintaining higher load factor.

The Commission would like to highlight Section 62(3) of the Act, which empowers the Appropriate Commission, while determining the tariff, to differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity etc. Section 62(3) of the Act is reproduced below:

> *"The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the* ***consumer's load factor****, power factor, voltage, total consumption of electricity during any specified period or the time*

at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required" ***(emphasis added)***.

Regulation 92(2) of UERC Tariff Regulations, 2018, specifically empowers the Commission to design load factor based tariffs for any category of consumers and is reproduced below:

"The Commission, shall not, while determining the tariff, show undue preference to any consumer of electricity but may differentiate according to consumer's load factor, voltage, total consumption of electricity during any specified period or time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. "

The Commission in its Order dated April 11, 2015 after detailed deliberations in response to the in-house paper had modified the slabs for load factor based tariff from three slabs to two slabs.

Further, as discussed in Chapter 2 of the Order, some of the stakeholders submitted that the principle applied for the categorisation of the industry on the basis of load factor should be on the principle of higher the load factor, lower the tariff as prevalent in other States. They further expressed that the higher load factor implies that the consumer consumes nearly as much as it has contracted for and has paid the demand charges accordingly, and the Utility stands to benefit by higher load factor because the utility is able to sell more electricity which it has arranged for meeting the demand of the consumer. They further opined that if the load factor is lower, the utility would find itself having contracted more power from generating companies than it would be able to sell to the consumers and in this process may suffer loss.

The Commission does not agree with the views of the stakeholders that higher load factor implies that the Utility stands to benefit from selling more electricity which it has arranged for meeting the demand of the consumer and load incidence on the system matches with the contracted demand/load of the consumers of the State. The Commission would like to clarify that there is diversity in time of usage of electricity by different consumers and, hence, the actual simultaneous maximum demand of all the consumers put together shall always be less than the summation of their contracted loads. Further, nowhere, the Utility makes the power purchase arrangement equivalent to the contracted demand of its consumers. Further, increase or decrease of the contracted load, and/or, the load factor, by consumer does not actually influence the consumption pattern of consumers including diversity factor and, hence, the actual simultaneous maximum demand is the basis for contracting power from different sources by the licensee rather than the contracted load/load factor of the consumers. Further, the utilisation of the contracted capacity for State consumption from firm sources of generation by UPCL is more than 90% and balance surplus, the Petitioner uses for Banking during summer/monsoon months in order to take it back during winter months when it has apparent deficit supply vis-a-vis demand. With the increase in load factor of consumers, the energy requirement of the Utility will further increase, and the Petitioner will be left with no surplus power to Bank during summer/monsoon months in order to take back during deficit winter months. This inability of the Petitioner will require to purchase power at marginal price, i.e. the Petitioner will have to purchase costlier power to meet the increase in energy requirement at higher load factor.

The two part tariff tends to encourage high consumption as the same reduces the effective per unit composite rate. Accordingly, to correct this, tariff also needs to increase in a manner so as to achieve a near uniform composite rate. To achieve this, demand and energy charges will have to increase with every small increase in contracted demand or load utilization percentage. Although theoretically possible, such an approach would make the tariffs too complex, incomprehensible and will pose serious problems in implementation. There is, therefore, a trade-off between the simplicity of the tariff structure and precision in correcting the above distortion. The Commission's attempt has been to strike a balance between the two by choosing a uniform rate of demand charge and different rates of energy charges linked to the consumption levels represented by the Load Factor. The Commission has avoided sharp increases in energy charges and has infact modified the three slabs in HT industry category prevalent earlier to only two slabs in its previous Tariff Order dated April 11, 2015.

As had been illustrated by the Commission in its previous Tariff Orders in case of single energy charge, without any load factor slabs, the effective tariff of an intended cross-subsidising consumer goes down steeply with increasing load factor, thereby reducing the quantum of cross-subsidy charged from it. After a threshold level of load factor, this structure leads to an undesirable anomaly that the effective tariff becomes lower than the average Cost of Supply and the consumer instead of being subsidising consumer becomes subsidised consumer. Thus, this structure apart from leading to the above said anomaly is highly inequitable amongst the consumers of the same category with consumers having low load factor being loaded with much higher effective tariff and making up for loss on account of lower effective tariff even below the average cost of supply paid by high load factor consumers. Transition from subsidising consumer to subsidised consumer with increasing load factor is not only incorrect but is also highly undesirable.

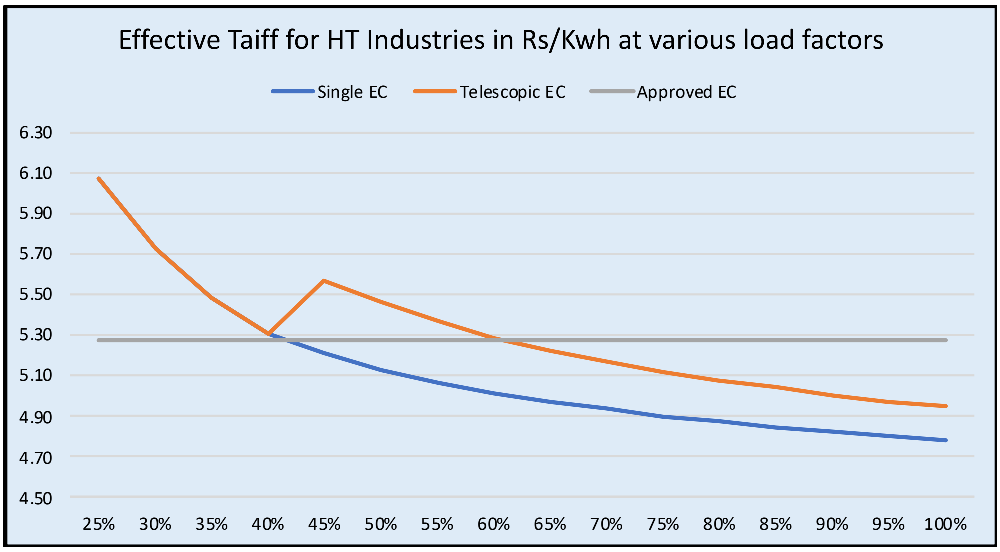
Some of the stakeholders represented that the tariff structure for HT Industries should also be telescopic. In Uttarakhand, as the cross-subsidies are very low, the tariff needs to be corrected at different load factors to ensure that steepness of the effective tariff curve does not reduce the cross-subsidies to very low level or make them negative (subsidised). Further, there is a practical difficulty in implementing slabs of tariffs for excess consumption only, due to ToD tariffs in vogue. Apportionment of various slabs of consumption for different time slots would be very complicated and would result in disputes between licensee and consumers as consumer would like to book cheapest load factor slab (1st slab) against peak hour consumption and highest load factor slab (last slab) against off-peak hour consumption. The licensee, on the other hand, would like to book first load factor slab against off-peak consumption and the last load factor slab under peak hour consumption. Thus, this structure would unnecessarily complicate the billing process and would also lead to disputes. Due to these reasons, the Commission is not implementing telescopic slab based tariff for HT industrial consumers.

The above reasoning can be easily explained by taking an example with the figures of approved tariff (Demand Charges Rs. 360/kVA/month and Energy Charges in two slabs of Rs. 3.95 and 4.35/kVAh for FY 2019-20, where Average Cost of Supply was taken as Rs. 5.28/kWh and average tariff from HT industrial consumers including ToD surcharge and rebate was designed to be Rs. 5.79/kWh. It is evident that in case of single energy charge of Rs. 4.10/kVAh and demand charge of Rs. 360/kVA/month, without any load factor slabs, the effective tariff of an intended cross-subsidising consumer goes down steeply with increasing load factor, thereby reducing the quantum of cross-subsidy charged from it. After a threshold level of load factor, this structure leads to an undesirable anomaly that the effective tariff becomes lower than the average Cost of Supply and the consumer instead of being subsidising consumer becomes subsidised consumer. Thus, this structure apart from leading to the aforesaid anomaly is highly inequitable amongst the consumers of the same category with consumers having low load factor being loaded with much higher effective tariff and making up for loss on account of lower effective tariff even below average Cost of Supply paid by high load factor consumers. The same applies to the condition if telescopic slab energy charges for HT industries [Demand Charges: Rs. 360/kVA/monthly, Energy Charges: for consumption upto LF 40%: Rs. 3.95/kVAh & for consumption exceeding LF 40%: Rs. 4.35 kVAh] are considered, the reduction in effective tariffs is almost similar to the case where single energy charges are approved without any slab. The Table & Graph below shows these anomalies of consumers getting cross-subsidised falling below average cost of supply after a particular load factor and wide range of tariffs over different load factors with the single energy charge without any slab and telescopic slabs. Increase of cross-subsidisation of HT industry with increasing load factor (particularly > 45%) is not only incorrect but also highly undesirable.

Table 5.2: Effective Tariff & Cross-subsidy for HT Industry having contracted load 1 MVA

Load Factor	Consumption (kVAh)	Demand Charge (Rs./kVA)	Energy Charge (Rs./kVAh)			Total Amount			Effective Tariff (Rs.kWh)			Cost of Supply	Cross Subsidy %		
			Single EC of Rs.3.60 /kVah	Telescopic Tariff	Approved Tariff	Single EC of Rs.3.60/ kVah	Telescopic Tariff	Approved Tariff	Single EC of Rs.3.60/kVah	Telescopic Tariff	Approved Tariff	Rs./ kWh	Single EC of Rs.3.60 /kVah	Telescopic Tariff	Approved Tariff
(1)	(2)	(3)	(4)	(5)	(6)	(7)=(3)+ (4)	(8)=(3)+ (5)	(9)=(3)+(6)	(10)=(7)/(2x 0.98)	(11)=(8)/(2x 0.98)	(12)=(9)/(2x 0.98)	-13	(14)=(10/13)-1	(15)=(11/13)-1	(16)=(12/13)-1
25%	180	360	738	711	711	1098	1071	1071	6.22	6.07	6.07	5.28	17.89%	14.99%	14.99%
30%	216	360	886	853	853	1246	1213	1213	5.88	5.73	5.73	5.28	11.45%	8.55%	8.55%
35%	252	360	1033	995	995	1393	1355	1355	5.64	5.49	5.49	5.28	6.84%	3.95%	3.95%
40%	288	360	1181	1138	1138	1541	1498	1498	5.46	5.31	5.31	5.28	3.39%	0.49%	0.49%
45%	324	360	1328	1294	1409	1688	1654	1769	5.32	5.21	5.57	5.28	0.71%	-1.33%	5.54%
50%	360	360	1476	1451	1566	1836	1811	1926	5.20	5.13	5.46	5.28	-1.44%	-2.79%	3.39%
55%	396	360	1624	1607	1723	1984	1967	2083	5.11	5.07	5.37	5.28	-3.19%	-3.99%	1.64%
60%	432	360	1771	1764	1879	2131	2124	2239	5.03	5.02	5.29	5.28	-4.66%	-4.98%	0.17%
65%	468	360	1919	1921	2036	2279	2281	2396	4.97	4.97	5.22	5.28	-5.90%	-5.82%	-1.07%
70%	504	360	2066	2077	2192	2426	2437	2552	4.91	4.93	5.17	5.28	-6.96%	-6.55%	-2.13%
75%	540	360	2214	2234	2349	2574	2594	2709	4.86	4.90	5.12	5.28	-7.88%	-7.17%	-3.05%
80%	576	360	2362	2390	2506	2722	2750	2866	4.82	4.87	5.08	5.28	-8.69%	-7.72%	-3.85%
85%	612	360	2509	2547	2662	2869	2907	3022	4.78	4.85	5.04	5.28	-9.40%	-8.20%	-4.56%
90%	648	360	2657	2704	2819	3017	3064	3179	4.75	4.82	5.01	5.28	-10.03%	-8.63%	-5.20%
95%	684	360	2804	2860	2975	3164	3220	3335	4.72	4.80	4.98	5.28	-10.59%	-9.02%	-5.76%
100%	720	360	2952	3017	3132	3312	3377	3492	4.69	4.79	4.95	5.28	-11.10%	-9.36%	-6.27%

Graph 1 : Effective HT Industrial Tariff



Hence, in view of the above, the Commission is continuing with the existing load factor based tariff structure for HT Industry.

5.1.3.9 Time of Day Tariff

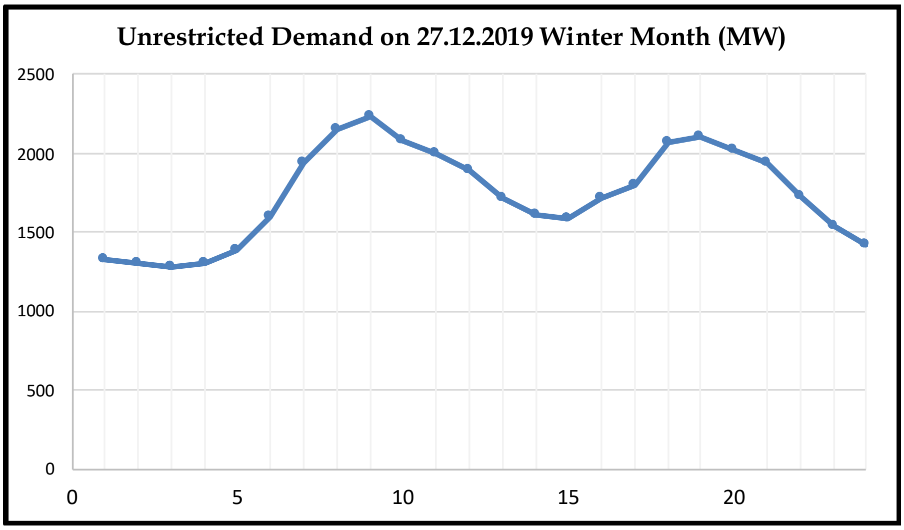
Regarding Time of Day Tariff, the stakeholders requested the following:

- Abolish the morning peak hours.
- Reduce the peak hours timings in such a manner that the Single Shift Industry can operate for 8 hours with normal tariff
- The ToD charges should be retained at existing levels.
- The rebate for consumption during off-peak hours should be increased

The Commission in its Tariff Order for FY 2010-11 dated April 10, 2010 approved the peak hour rate as 50% higher than the normal hour rate for Industrial Category. Further, in case of HT industries, the Commission has specified the peak hour rate as 50% higher than the normal hour rate applicable for highest load factor slab, i.e. energy charge for load factor above 50% for all the HT industrial consumers. The Commission kept the rebate during off peak hours to 10% to incentivise the shift in consumption from peak hours to off peak hours. The Commission in its Tariff Order dated 21.03.2018 in order to incentivise the consumers for shifting the demand from Peak hours to Off Peak hours, increased the off-peak hour rebate from existing level of 10% to 15% in energy charges.

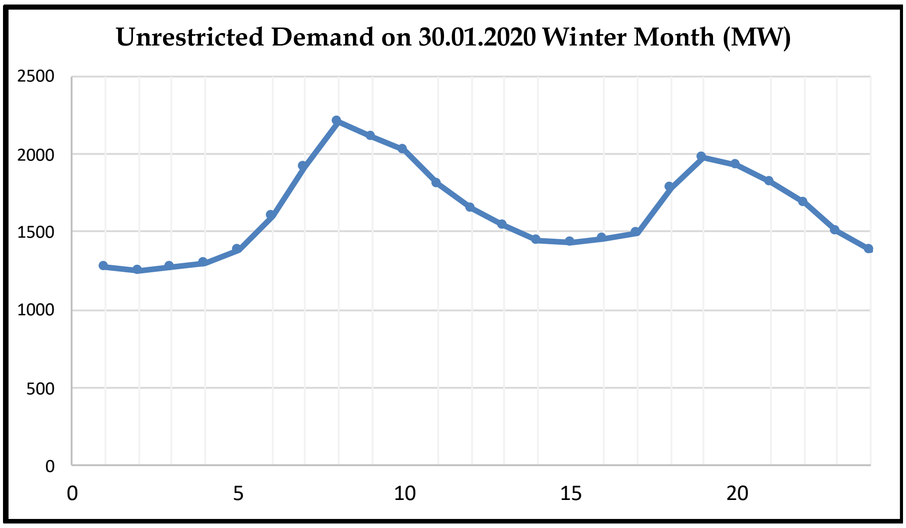
The Commission, in each of its tariff determination exercise, has been analysing the shift from the peak hours to normal and off-peak as well as the consumption pattern during the peak and off-peak hours in the State. The Commission has analysed the unrestricted load curves in summer as well as the winter month to assess the consumption during peak hours in these months. The load curves for the days having highest peak load in the months of summer and winter season, have been examined and the same are graphically presented below:

Chart 1: Load Curve for 27th December 2019 (MW) [Winter Month]



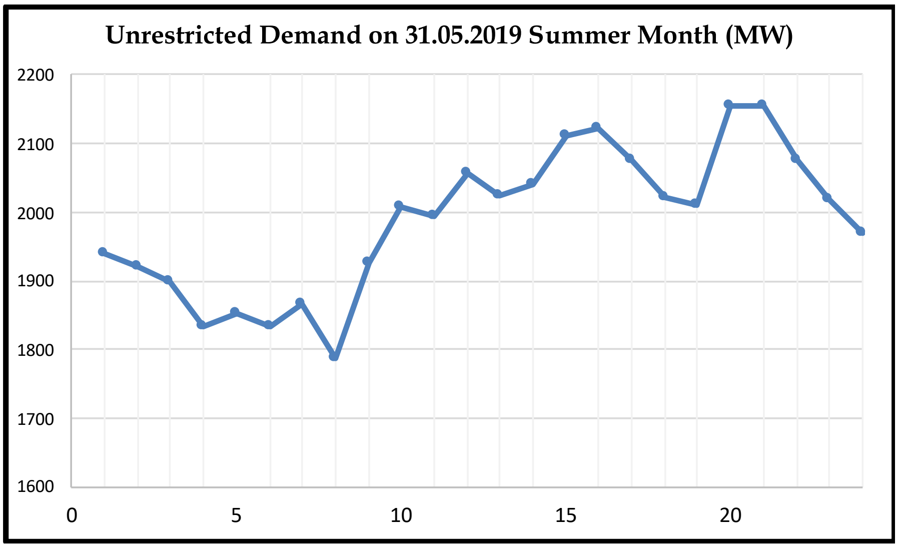
Morning Peak Demand – 2233 MW at 9.00 AM
Evening Peak Demand - 2103 MW at 7.00PM

Chart 2: Load Curve for 30th Jan 2020 (MW) [Winter Month]



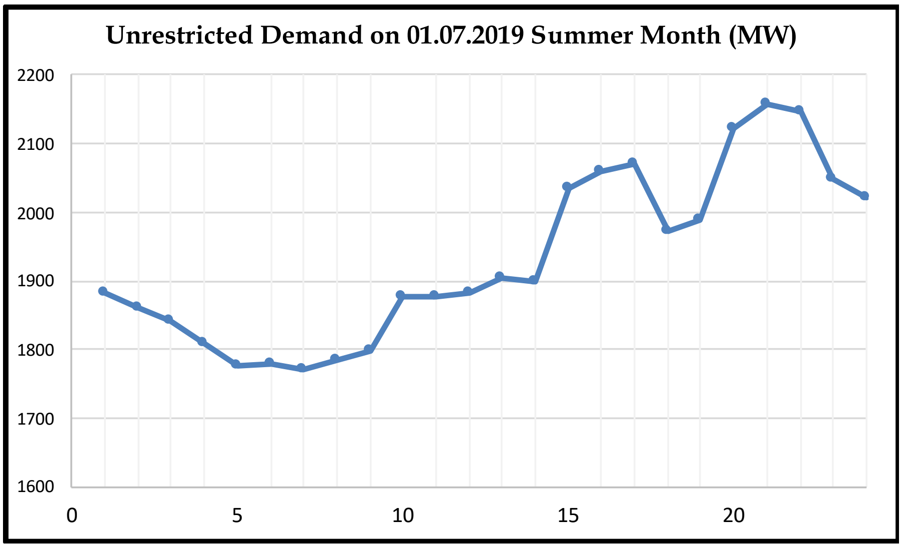
Morning Peak Demand – 2208 MW at 8.00 AM
Evening Peak Demand – 1972 at 7.00 PM

Chart 3: Load Curve for 31st May, 2019 (MW) [Summer Month]



Peak Demand – 2156 MW at 8.00 PM
No Morning Peak

Chart 4: Load Curve for 1st July, 2019 (MW) [Summer Month]



Peak Demand – 2158 MW at 9.00 PM
No Morning Peak

It is observed from the above graphical presentations that during the winter season both morning as well as evening peak demand exists in the State. Infact, in the months of December and January, the morning peak demand has been found to be even more pre-dominant than the evening peak demand. From Chart 1 & 2 illustrating the load curve for December 27, 2019 and January 30, 2020 respectively, it can be observed that the demand starts rising from 6.00 a.m. till it reaches the peak at about 8.00 a.m. or 9.00 am and then starts falling around 9.00 a.m. in the morning and flattens by around 11.00 a.m. Hence, the request of the stakeholders regarding abolishing the morning peak hours cannot be accepted since it would defeat the demand side management through tariffs in vogue in the State. Further, it is seen from the above graphs that the overall system peak of Uttarakhand State during the year is significantly observed in the morning hours also besides evening peak.

The Commission feels the need for DSM and having ToD tariff as a measure for ensuring curtailment of morning as well as evening peaks. Considering all these aspects, the Commission in the present Order is continuing with the morning peak hours during winter season and evening peak hours for the entire year. During the last tariff exercise, some of the stakeholders requested that the peak hour slots shall be modified in such a way that the General Single Shift Industry should get clear 8 hours of operations at normal tariff. The Commission in its Order dated February 27, 2019 considering the requests of stakeholders and the load pattern during peak hours modified the Peak, Normal and Off Peak hour duration for ToD metering slots in such a manner that the Industry gets nine hours for working during normal hours and they are able to operate eight hours in General Shift with one hour break. Hence, the Commission has decided to continue the Peak, Normal and Off Peak hour duration for ToD metering slots as approved in Order dated February 27, 2019 as follows:

Table 5.3: Effective Tariff & Cross-subsidy for HT Industry

Season/Time of day	Morning Peak hours	Normal hours	Evening Peak Hours	Off-peak Hours
Winters 01.10 to 31.03	0600-0900 hrs	0900-1800 hrs	1800-2200 hrs	2200-0600 hrs
Summers 01.04 to 30.09	--	0700-1800 hrs	1800-2300 hrs	2300-0700 hrs

Considering the load curves, the Commission has kept the surcharge during peak hours and incentive for Off-peak hours at the same level as approved in previous Order dated 27.02.2018.

5.1.3.10Prepaid metering

The Commission recognises that Prepaid Metering is expected to provide better services to the consumers, improve and secure the cash flow of the Petitioner and also lead to reduction in consumer grievance and dissatisfaction to the consumers.

The Petitioner has proposed some modifications in the existing terms of the pre-paid supply approved by the Commission for FY 2019-20 without providing any reasons for the same. The Petitioner has proposed a completely different tariff structure for BPL consumers and small non-domestic consumers opting prepaid tariffs. Similary, the Commission has approved the domestic tariffs for Gaushalas/Gausadans having load upto 4 kW and consumption upto 600 units in this Order. However, the Petitioner has proposed to do away with the monthly ceiling of consumption. Similary at present domestic consumers having load upto 2 kW and consumption upto 200 units/month and using some portion of the premise for non-domestic purposes are charged domestic tariffs. However, the Petitioner has proposed to cover them under non-domestic category . Thus, as is evident the proposals of the Petitioner are discriminatory between those who are opting for prepaid connections and those who have postpaid connections which is also against the intent of the Act and, hence, the same cannot be allowed.

Thus, after detailed deliberations on the proposals of the Petitioner, the Commission approves the following conditions for Pre-Paid Metering:

a) The option of Pre-paid metering shall be available for all categories of consumers upto 25 kW load under LT category. Prepaid Metering shall be mandatory for new Temporary LT connections, for Advertisements/Hoardings and for Government connections upto 25 kW.

   Provided that the option of prepaid metering shall not be available to the Seasonal industries covered under Rate Schedule RTS-5.

b) There shall be a minimum recharge of Rs. 100 and the maximum limit of recharge shall be Rs. 15,000 for both single phase and three phase connections. Validity of the recharge shall be continued till the amount is available in the account of the consumer. Any recharge shall be allowed only when the 20 digit special meter reading code shall be made available by the consumer.

c) As regards the charging for testing of meter, the Petitioner shall recover the amount as approved by the Commission under Schedule of Miscellaneous Charges directly from such prepaid consumers as is done for postpaid consumers and shall not be charged from the recharge amount.

d) The Petitioner shall issue an advertisement in the newspapers within 15 days of the issue of this Order, briefly mentioning salient features of the Prepaid Metering Scheme for LT consumers upto 25 kW to provide an option to the consumer to express their interest to opt for the Prepaid metering scheme latest by June 15, 2020.

   It may be noted that the objective of calling applications for Prepaid metering shall be primarily for the purpose of estimation of the requirement of such meters based on the demand of the Scheme. Based on the requests received from the consumers opting for Prepaid metering, UPCL shall implement the Prepaid metering in a phased manner. Further, the Petitioner may also allow prepaid metering services to even those consumers who could not submit their request within the above stipulated time given in the advertisement and wish to opt for it subsequently.

e) The Petitioner is also directed to prepare a Salient Features of the Prepaid Metering Scheme (in 1-2 pages) and circulate the same along with the bills of May, 2020 to all the eligible consumers, i.e. LT consumers upto 25 kW, to facilitate wide circulation as well as to provide salient features of the proposed mechanism of the Prepaid Metering Scheme.

f) In case, the consumer opting for Prepaid Metering have outstanding arrears, the Petitioner shall adjust 20% of the past arrears or 50% of the recharge amount, whichever is higher from the recharge voucher, subject to the maximum of the outstanding arrears. Further, the maximum limit of recharge as mentioned above, shall not be applicable in case of consumers having outstanding arrears and accordingly, such consumers having past arrears will have to take minimum recharge of more than 20% of the outstanding arrears.

g) The Petitioner shall make necessary provisions to provide friendly credit hours/limit to the consumers, in order to ensure uninterrupted supply to the consumer in the event of expiry of the balance during non-working hours, i.e. night time or during holiday, so as to provide reasonable time to the consumer to procure the recharge voucher at the next possible working hours or working day. However, the charges for the electricity consumed between expiry of balance during non-working hours and subsequent recharge voucher shall be adjusted from the recharge voucher.

h) All the Prepaid meters will be provided with an alarm to indicate low credit.

i) As per the guiding principles and Section 47(5) of the Electricity Act, 2003, the Petitioner shall not charge any security deposit as is required in post-paid connections but price equivalent to the material cost, i.e. cost of meter and associated equipment's shall be charged as material security which shall be returned after adjusting for the depreciation at the time of permanent disconnection. The approved material security deposit (except for BPL domestic) for FY 2020-21 is Rs. 5000/- for single phase connection and Rs 10,000/- for three phase connection. BPL domestic consumers shall be exempted for payment of material security deposit.

j) The consumer shall be allowed only one transfer from postpaid to prepaid or otherwise in a financial year.

k) Voltage rebate/surcharge, low power factor surcharge and excess load penalty shall not be applicable for prepaid connections.

l) A rebate of 4% of Energy Charges for Domestic Category and 3% of Energy Charges for other categories shall be applicable as per tariff schedule for the consumers availing this scheme and the rebate shall only be applicable after installation and operationalization of Prepaid meters.

   Provided that no rebate shall be applicable on (i) of Para 1 of RTS-8, i.e. Temporary Supply for Illumination/Public Address/ceremonies and festivities/functions/ temporary shops not exceeding 3 months.

   Provided further that the fixed charge in respect of other domestic consumers [(1.2) of para 2 of the RTS -1] shall be Rs. 60/kW/month.

m) The solar water heater rebate shall be adjusted as follows:-

   i. The rebate for first month of implementation of prepaid metering scheme shall be credited immediately on the first recharge. Thereafter, rebate shall be credited on monthly basis if recharge is done every month.

   ii. In case recharge is not being done on monthly basis, then based on the capacity of Solar Water Heater installed by the consumer, solar water heater rebate would be credited for all the past months for which the rebate was due either at the time of recharge or when the consumer approaches UPCL.

5.1.3.11Miscellaneous Charges

With respect to UPCL's proposal regarding revision in miscellaneous charges pertaining to testing and installation of meters, the Commission would like to point out that that the proposals were made after the public hearings were over and views of the stakeholders could not be sought on the proposals of UPCL. Hence, the Commission has not considered the same. However, the Petitioner is advised to file a separate Petition for seeking revision in miscellaneous charges and the Commission after seeking responses of all the stakeholders would take appropriate views on the same.

5.1.4 *Treatment of Revenue Gap*

As concluded in Chapter 4 of the Order, the revenue at existing tariffs leaves a revenue gap of Rs. 206.12 Crore to meet the Net Revenue Requirement for FY 2020-21, post adjustment of the revenue surplus determined after truing up of expenses and revenues based on the audited accounts for FY 2018-19.

The Commission in order to recover the gap has revised the tariffs for FY 2020-21. The approved tariff will be applicable from April 1, 2020 and will be effective till revised by the Commission.

5.1.5 *Cross Subsidy*

As per the provisions of Tariff Policy, the Regulatory Commission has to reduce the cross subsidies with respect to the cost of supply in a gradual manner. The Commission in its Tariff Order for FY 2019-20 had computed the cross subsidies for different category of subsidising consumers which were in accordance with the Tariff Policy.

The Commission has now revised the tariffs and has ensured that the cross subsidies have broadly reduced or maintained with respect to previous levels with few exceptions as discussed while discussing the cross subsidy levels at approved tariffs.

5.1.6 *Category-wise Tariff Design*

The Commission has designed the category-wise tariffs for full recovery of approved Net Revenue Requirement for FY 2020-21. The category-wise tariffs approved by the Commission are discussed below and are also shown in the Approved Rate Schedule placed at **Annexure-1**. These rates shall be effective from April 1, 2020 and shall continue to be applicable till further revised by the Commission.

5.1.7 *RTS-1: Domestic Tariff*

The Commission, while recognising the fact that BPL/lifeline consumers were one of the most economically weaker sections of the consumers, in its Tariff Order for FY 2003-04 had approved a tariff of Rs. 1.50/kWh for such consumers when the average cost of supply was Rs. 2.28/kWh. Considering the fact that the Tariff Policy permits that the tariffs for such BPL/lifeline consumers can be determined at 50% of the average cost of supply, the Commission in order to gradually reduce the cross subsidy and also to enable the licensee to recover some of its Fixed Cost, in its Tariff Order for FY 2011-12 dated May 24, 2011 had introduced a Fixed Charges of Rs. 5/connection/month which was further nominally increased every year.

As overall tariff increase required for meeting the revenue requirement of UPCL for FY 2020-21 is marginal, the tariff for BPL consumers have been retained at same level with no change.

For other domestic consumers, the fixed charges have been marginally increased to enhance the recovery from fixed charges. The energy charges for lowest slab, i.e. consumption upto 100 units/month have been nominally increased from the existing level of Rs. 2.75/kWh to Rs. 2.80/kWh. The energy charges for the second slab, i.e. for consumption between 101-200 units/month have been fixed as Rs. 3.75/kWh. The energy charges for the third slab, i.e. for consumption between 201-400 units/month have been fixed as Rs. 5.15/kWh and for consumers having consumption above 400 units/month, the energy charges have been fixed at Rs. 5.90/kWh.

For single point bulk supply connections, the energy charges have been increased to Rs. 4.85/kWh from Rs. 4.40/kWh and fixed charges have been increased to Rs. 85/kW/month from Rs. 75/kW/month.

A comparison of the tariff, i.e. existing, proposed by the Petitioner and that approved by the Commission, is given in the Table below:

Table 5.4: Tariff for Domestic Consumers

S. No.	Description	Existing Tariff		UPCL Proposed Tariff		Approved	
		Fixed Charge (Per Month)	Energy Charges	Fixed Charge (Per Month)	Energy Charges	Fixed Charge (Per Month	Energy Charges
	RTS-1: Domestic						
1.1	Life Line Consumers	Rs. 18/ Connection	Rs. 1.61/kWh	Rs. 18/ Connection	Rs. 1.90/kWh	Rs. 18/ Connection	Rs. 1.61/kWh
1.2	**Other Domestic Consumers**						
(i)	0-100 Units/Month	Rs. 55/ Connection	Rs. 2.75/kWh	Rs. 75/ Connection	Rs. 3.26/kWh	Rs. 60/ Connection	Rs. 2.80/kWh
(ii)	101-200 Units/Month	Rs. 85/ Connection	Rs. 3.55/kWh	Rs. 135/ Connection	Rs. 5.25/kWh	Rs. 95/ Connection	Rs. 3.75/kWh
(iii)	201-400 Units/Month	Rs. 145/ Connection	Rs. 4.90/kWh	Rs. 135/ Connection	Rs. 5.25/kWh	Rs. 165/ Connection	Rs. 5.15/kWh
(iv)	Above 400 Units/Month	Rs. 230/ Connection	Rs. 5.65/kWh	Rs. 135/ Connection	Rs. 5.25/kWh	Rs. 260/ Connection	Rs. 5.90/kWh
2	Single point bulk supply	Rs. 75/kW	Rs. 4.40/kWh	Rs. 85/kW	Rs. 4.85/kWh	Rs. 85/kW	Rs. 4.85/kWh

5.1.7.1 RTS 1-A: Concessional Snowbound Area Tariff

A comparison of the tariff, i.e. existing, proposed by the Petitioner and that approved by the Commission, is given in the Table below:

Table 5.5: Concessional Tariff for Snowbound Areas

S. No.	Description	Existing Tariff		UPCL Proposed Tariff		Approved	
		Fixed Charge (Per Month)	Energy Charges	Fixed Charge (Per Month)	Energy Charges	Fixed Charge (Per Month)	Energy Charges
RTS-1A: Snowbound							
1.	Domestic	Rs. 18/ Connection	Rs. 1.61/kWh	Rs. 25/ Connection	Rs. 1.61/kWh	Rs. 18/ Connection	Rs. 1.61/kWh
2.	Non-Domestic upto 1 kW	Rs. 18/ Connection	Rs. 1.61/kWh	Rs. 25/ Connection	Rs. 1.61/kWh	Rs. 18/ Connection	Rs. 1.61/kWh
3.	Non-Domestic above 1 kW & upto 4 kW	Rs. 18/ Connection	Rs. 2.36/kWh	Rs. 25/ Connection	Rs. 2.36/kWh	Rs. 18/ Connection	Rs. 2.36/kWh
4.	Non-Domestic above 4 kW	Rs. 30/ Connection	Rs. 3.51/kWh	Rs. 40/ Connection	Rs. 3.51/kWh	Rs. 30/ Connection	Rs. 3.51/kWh

5.1.8 *RTS-2: Non-Domestic Tariff*

For Non-domestic consumers, the Commission has marginally increased the energy charges and fixed charges to enable the licensee to recover its fixed cost and revenue gap. The Commission has separately specified the tariff for concessional sub-category of educational institutions, hospitals and charitable institutions, which shall include:

- Government/Municipal Hospitals;

- Government/Government Aided Educational Institutions; and
- Charitable Institutions registered under the provisions of Income Tax Act, 1961 and whose income is exempted from tax under this Act.

The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

Table 5.6: Tariff for Non Domestic

S. No.	Description	Existing Tariff		UPCL Proposed Tariff		Approved	
		Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges
1	**Government, Educational Institutions and Hospitals etc.**						
1.1	Upto 25 kW	Rs. 65/ kW	Rs. 4.50/ kWh	Rs. 90/ kW	Rs 5.00/ kWh	Rs. 70/ kW	Rs. 4.60/ kWh
1.2	Above 25 kW	Rs. 75/ kVA	Rs. 4.25/ kVAh	Rs. 100/ kVA	Rs. 4.80/kVAh	Rs. 80/ kVA	Rs. 4.35/ kVAh
2	**Other Non-Domestic Users**						
2.1	Upto 4 kW and consumption upto 50 units per month	Rs. 70 / kW	Rs. 4.70/ kWh	Rs. 80 / kW	Rs. 4.85/ kWh	Rs. 70 / kW	Rs. 4.70/ kWh
2.2	Others upto 25 kW not covered in 2.1 above	Rs. 75 / kW	Rs. 5.60/ kWh	Rs. 90 / kW	Rs. 6.45/ kWh	Rs. 85 / kW	Rs. 5.75/ kWh
2.3	Above 25 kW	Rs. 75 / kVA	Rs. 5.45/ kVAh	Rs. 90 / kVA	Rs. 6.15/kVAh	Rs. 85 / kVA	Rs. 5.60/ kVAh
3	Single Point Bulk Supply above 75 kW	Rs. 75 / kVA	Rs. 5.50/ kVAh	Rs. 90 / kVA	Rs. 6.20/kVAh	Rs. 85 / kVA	Rs. 5.65/ kVAh
4	Independent Advertisement Hoardings	Rs. 90/ kW	Rs. 6.10/kWh	Rs. 90 / kW	Rs. 6.45/ kWh	Rs. 100/ kW	Rs. 6.25/kWh

5.1.9 *RTS-3: Government Public Utilities*

The tariff for this category has been approved in such a manner so that the average billing rate for this category is close to the average cost of supply. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

Table 5.7: Tariff for Government Public Utilities

Description	Existing Tariff		UPCL Proposed Tariff		Approved	
	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges
Urban (Metered)	Rs. 60/kVA	Rs. 5.20/ kVAh	Rs. 100/kVA	Rs. 5.80/ kVAh	Rs. 70/kVA	Rs. 5.40/ kVAh
Rural (Metered)	Rs. 50/kVA	Rs. 5.20/ kVAh	Rs. 90/kVA	Rs. 5.80/ kVAh	Rs. 60/kVA	Rs. 5.40/ kVAh

5.1.10 *RTS-4: Private Tube Wells/Pump Sets and Agriculture Allied Activities*

The Commission in order to gradually reduce the cross subsidy in this category has increased the energy charge from Rs. 1.95/kWh to Rs. 2.03/kWh for PTW consumers and to Rs. 2.25/kWh for Agriculture Allied Activities.

The existing tariff, tariff proposed by the licensee and that approved by the Commission are given in the Table below:

Table 5.8: Tariff for Private tube Wells/ Pump Sets

Category	Existing Tariff		UPCL Proposed Tariff		Approved	
	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges
RTS-4: Private Tube-wells / Pumping sets						
Metered	Nil	Rs. 1.95/ kWh	Nil	Rs. 2.15/ kWh	Nil	Rs. 2.03/ kWh
RTS-: **4A: Agriculture Allied Activities**						
Metered	Nil	Rs. 1.95/ kWh	Nil	Rs. 2.15/ kWh	Nil	Rs. 2.25/ kWh

5.1.11 *RTS-5: Industry*

The Commission while determining the tariff of HT and LT Industries has taken into consideration the average cost of supply and cross subsidy.

Further, as discussed above, the Commission has decided to retain the peak hour rate as 50% higher than the normal hour rate applicable for highest slab, i.e. with load factor above 40% for all the HT industrial consumers and retain the off peak hour rebate as 15%. Further, consumers opting for continuous supply as per eligibility given in this Order shall have to pay 7.5% additional energy charges as continuous supply surcharge only on energy supply made by UPCL, i.e. the surcharge will not be applicable if power is sourced through open access.

The existing tariff, tariff proposed by the licensee and that approved by the Commission for LT Industry is given in the Table below:

Table 5.9: Tariff for LT Industry

Category	Existing Tariff		UPCL Proposed Tariff		Approved	
	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges
RTS-5: Industry						
LT Industry						
1. LT Industries (upto 10 kW)	Rs. 145/ kW	Rs. 4.35/ kWh	Rs. 180/ kW	Rs. 4.80/ kWh	Rs. 155/ kW	Rs. 4.60/ kWh
2. LT Industries (above 25kW & upto 75 kW)	Rs. 145/ kVA	Rs. 4.00/ kVAh	Rs. 180/ kVA	Rs. 4.40/ kVAh	Rs. 150/ kVA	Rs. 4.25/ kVAh

The existing tariff and tariff proposed by the licensee and that approved by the Commission for HT Industry is given in the Table below:

Table 5.10: Existing, Proposed and Approved Tariff for HT Industries

S. No.	Category	Load Factor	Existing Tariff		UPCL Proposed Tariff		Approved Tariff	
			Energy Charges (Rs./kVAh)	Demand Charges (Rs./kVA)	Energy Charges (Rs./kVAh)	Demand Charges (Rs./kVA)	Energy Charges (Rs./kVAh)	Demand Charges (Rs./kVA)
1	**HT Industry having contracted load above 88kVA/75 kW (100 BHP)**							
1.1	Contracted Load up to 1000 kVA	Upto 40%	3.95	Rs. 300/kVA of the billable demand	4.40	Rs. 350/kVA of the billable demand	4.20	Rs. 310/kVA of the billable demand
		Above 40%	4.35		4.75		4.60	
1.2	Contracted Load More than 1000 kVA	Upto 40%	3.95	Rs. 360/kVA of the billable demand	4.40	Rs. 445/kVA of the billable demand	4.20	Rs. 370/kVA of the billable demand
		Above 40%	4.35		4.75		4.60	

5.1.12 *RTS-6: Mixed Load*

The Commission has increased the tariff for this category to reduce the level of cross subsidy. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

Table 5.11: Tariff for Mixed Load

Description	Existing Tariff		UPCL Proposed Tariff		Approved Tariff	
	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges
RTS-6: Mixed Load						
Mixed Load Single Point Bulk Supply above 75 kW including MES as deemed licensee	Rs. 80/kW	Rs. 5.05/kWh	Rs. 110/kW	Rs. 5.70/kWh	Rs. 90/kW	Rs. 5.30/kWh

5.1.13 *RTS-7: Railway Traction*

The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

Table 5.12: Tariff for Railway Traction

Description	Existing Tariff		UPCL Proposed Tariff		Approved Tariff	
	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges	Fixed Charges (Per Month)	Energy Charges
RTS-7: Railway Traction	Rs. 250/kVA	Rs. 4.40/ kVAh	Rs. 320/kVA	Rs. 5.00/ kVAh	Rs. 250/kVA	Rs. 4.65/ kVAh

5.1.14 *RTS-8: Electric Vehicle Charging Stations*

As discussed earlier, the Commission has decided to create a new category for Electric Vehicle Charging Stations. The tariff proposed by the licensee and that approved by the Commission is given in the Table below:

Table 5.13: Tariff for Electric Vehicle Charging Stations

Description	UPCL Proposed Tariff		Approed Tariff	
	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges
RTS-8: Electric Vehicle	--	Rs. 6.00/ kWh	--	Rs. 5.50/ kWh

5.2 Revenue for FY 2020-21

Considering the revised tariffs, the Commission has projected revenue at the approved tariffs from each category for FY 2020-21. The summary of category-wise projected revenue for FY 2020-21 is given in the following Table:

Table 5.14: Summary of Category Wise Projected Revenue at Approved Tariffs

S. No.	Category	Sales	Revenue	Average Billing Rate (ABR)
		MU	Rs. Crore	Rs./Unit
1.	RTS-1: Domestic	3123.11	1386.26	4.44
2.	RTS-2: Non Domestic	1413.41	902.27	6.38
3.	RTS-3: Govt. Public Utilities	643.23	374.84	5.83
4.	RTS-4: Private Tube Wells	196.91	40.21	2.04
5.	RTS-5: Industry			
	LT Industry	317.13	191.13	6.03
	HT Industry	6633.04	4016.88	6.06
6.	RTS-6: Mixed Load	183.55	103.54	5.64
7	RTS-7: Railway Traction	29.27	17.36	5.93
8.	Additional Sales (Efficiency improvement)	36.56	20.50	5.61
Total		**12576.21**	**7052.99**	**5.61**

The estimated revenue for FY 2020-21 at approved tariffs works out to Rs. 7052.99 Crore, as against the net ARR of Rs. 6957.12 Crore worked out after adjusting trued-up surplus/gaps of previous years leaving a surplus of Rs. 95.87 Crore with UPCL. The Commission has left some surplus while designing the tariffs as exact impact of all the tariff rationalisation measures approved by the Commission cannot be estimated at this stage. Further, UPCL is yet to submit the Electrical Inspector Certificates for some part of the capitalisation during last 3 years which will have impact on ARR for FY 2020-21 at the time of truing up and also keeping in view the unquantifiable impact of COVID-19. The Commission will consider the actual sales and revenues while carrying out the truing up for FY 2020-21.

5.3 Cross Subsidy

As discussed above, the Commission has designed the tariffs for various categories with an objective of gradually reducing the cross subsidy with respect to average cost of supply. The extent of category-wise cross-subsidy at approved tariffs computed at average cost of supply is given in the Table below:

Table 5.15: Cross Subsidy at Average Cost of Supply

Category	Approved Average Billing Rate (ABR)	Average Cost of Supply (ACoS)	ABR / ACoS	Cross Subsidy
	Rs./kWh	Rs./kWh	%	%
RTS-1: Domestic	4.44	5.53	80.27%	-19.73%
RTS-2: Non Domestic	6.38	5.53	115.44%	15.44%
RTS-3: Govt. Public Utilities	5.83	5.53	105.38%	5.38%
RTS-4: Private Tube Wells	2.04	5.53	36.93%	-63.07%
RTS-5: Industry				
LT Industry	6.03	5.53	108.98%	8.98%
HT Industry	6.06	5.53	109.51%	9.51%
RTS-6: Mixed Load	5.64	5.53	102.01%	2.01%
RTS-7: Railway Traction	5.93	5.53	107.23%	7.23%

The comparison of Cross Subsidy at approved tariffs with respect to the average cost of supply in the Tariff Order for FY 2019-20 and as approved in this Tariff Order for FY 2020-21 is given below:

Table 5.16: Cross Subsidy at Approved Tariffs in FY 2019-20 and FY 2020-21

Category	Cross Subsidy at Approved Tariff for FY 2019-20	Cross Subsidy at Approved Tariff for FY 2020-21
RTS-1: Domestic	-19.79%	-19.73%
RTS-2: Non Domestic	15.47%	15.44%
RTS-3: Govt. Public Utilities	3.28%	5.38%
RTS-4: Private Tube Wells	-63.07%	-63.07%
RTS-5: Industry		
LT Industry	9.11%	8.98%
HT Industry	9.74%	9.51%
RTS-6: Mixed Load	1.41%	2.01%
RTS-7: Railway Traction	7.07%	7.23%

The Commission while designing the tariffs for FY 2020-21 has reduced the cross subsidies for most of the categories with respect to approved tariffs for FY 2019-20 and has ensured to bring the cross-subsidy levels within the range specified in the National Tariff Policy.

Further, it can be seen from the Table above, cross-subsidies of all the subsidising consumers is within the range of 120% as required in the Tariff Policy.

Further, once the cross-subsidy level has been reduced to be within ±20%, there is no mandate under the Act or Tariff Policy to reduce it further. The criteria of ± 20 % of the average cost of supply for all the categories including subsidised categories depends upon the consumption mix of the Licensee. However, in case of the Petitioner, the consumption mix is skewed towards subsidising categories having almost two third of total sales, while the consumption by subsidised categories is around one third of the total consumption. Therefore, in case of Petitioner, though the tariff for all the subsidising categories have been within 120% of the overall average cost of supply of the Petitioner, the average tariff for some of the subsidised categories is less than 80% of the overall average cost of supply of the Petitioner.

Hon'ble Appellate Tribunal of Electricity, in its Judgment dated February 28, 2012, in Appeal No. 159 of 2011 has expressed similar views. The relevant extract given in Para 16 of the Judgment is reproduced as under:

"... Provision of restricting cross subsidy to +/- 20% in Tariff Policy is applicable to areas where proportion of both the categories, subsidizing and subsidized, are comparable. The same yard stick cannot be applied in areas where consumer mix is highly biased in favour on one category."

5.4 Open Access Charges

Uttarakhand Electricity Regulatory Commission (Terms and Conditions of Intra State Open Access) Regulations, 2015 inter-alia specify wheeling charges applicable on the customers seeking open access through distribution system, based on the category/nature of open access these customers come under in accordance with the Regulations.

In this regard, Regulation 20(2) specifies as under:

"Wheeling charges payable to distribution licensee, by an open access customer for usage of its system shall be as determined as under:

Wheeling Charges = (ARR–PPC–TC) /(PLSD X365) (Rs./MW/Day)

Where,

ARR=Annual Revenue Requirement of the distribution licensee for the relevant year

PPC= Total Power Purchase Cost of distribution licensee for the relevant year

TC = Total transmission charges paid by distribution licensee for State and Inter-State

transmission system for the relevant year

PLSD= Total Peak load served by the concerned distribution system for the previous year

Provided where Open Access is allowed up to contracted load, embedded open access consumer shall pay wheeling charges as determined by the Commission in the following

manner:

*WC Embedded consumer = WC – [FC*0.85*12*1000/365] (in Rs./MW/day)*

Where,

WC Embedded consumer = Net wheeling charges for embedded consumers

WC= Wheeling charges as determined by the Commission in accordance with the methodology specified in Regulation 20(2) contained in Chapter 5 of these regulations.

FC= Fixed/demand charges in Rs/kVA/month as per rate schedule approved in the Tariff Order for the relevant year. For the purpose of conversion of kVA into kW power factor of 0.85 has been taken.

Note: In case Wheeling Charges for Embedded consumer worked out as above becomes negative, such *charge shall be zero.*

Provided that wheeling charges shall be payable on the basis of Approved Capacity.

Provided where open access is allowed beyond the contracted load, embedded open access consumer shall pay wheeling charges for the excess load as determined by the Commission in the following manner:

WC For excess load allowed= (ARR–PPC–TC) /(PLSD X365) (Rs./MW/Day)"

Thus, as can be seen from the above reading of the Regulations wheeling charges for the open access consumers shall be determined as under:

Wheeling Charges = (ARR–PPC–TC) /(PLSD X365) (Rs./MW/Day)

ARR as approved by the Commission in the Table 4.50 is Rs. 7231.69 Crore and after excluding the power purchase cost and Transmission Charges, the net amount works out to Rs. 973.67 Crore.

The PLSD during FY 2019-20 is 2233 MW.

Hence, in accordance with the methodology provided in the aforesaid Regulations, the wheeling charges payable by customers seeking open access for FY 2020-21 (applicable upto 31st March, 2021) shall be:

Table 5.17: Wheeling Charges approved for FY 2020-21

Description	Rs./MW/day
Wheeling Charges	**11,946/-**

"Embedded open access consumers" who have been allowed open access up to the contracted load shall not pay the wheeling charge as above who shall otherwise pay net wheeling charges calculated in accordance with the methodology specified in the regulations and the same works out to Rs. 1606/MW/day for HT industry consumers having contracted load above 1000 kVA and Rs. 3283/MW/day for HT industry consumers having contracted load upto 1000 kVA. Non-Domestic consumers shall pay wheeling charges of Rs. 9571/MW/day. Moreover, "embedded open access consumers" who have been allowed open access beyond the contracted load shall pay wheeling charges for the excess load equal to Rs. 11946/MW/day. However, where a dedicated distribution system for open access has been constructed for exclusive use of an open access customer, the wheeling charges for such dedicated system shall be worked out by the distribution licensee for its respective system and shall get it approved by the Commission and will be borne entirely by such open access customer till such time the surplus capacity is allotted and used by other open access customers, where after, the cost of the above system will be shared on pro-rata basis depending upon open access capacity allotted to them. Provided that wheeling charges shall not be levied on the open access customers connected to the transmission system at 132 kV and above voltage levels. The distribution losses applicable to open access customers for FY 2020-21 shall be the pooled average system distribution losses, i.e. 14.00% considered in this Order. Cross subsidy surcharge applicable, in accordance with the Regulations, to open access customers for FY 2020-21 have been determined as Rs. 0.53/kWh for HT industrial consumers and Rs. 0.85/kWh for non-domestic consumers.

The Petitioner is hereby directed that the wheeling charges and cross subsidy surcharge recovered from open access customers shall be shown separately under the separate head of income in its ARR/Tariff filings.

The Petitioner in its Petition had submitted that the consumers shifting to open access impact the power off take of the utility from the generating stations. Such consumers should be liable to pay an additional surcharge to meet the fixed cost of the distribution licensee arising from the obligation to supply. Absence of suitable additional surcharge levied to the open access consumer would result in undue burdening on the other licensee consumers. Therefore, the Petitioner requested the Commission to propose an appropriate methodology for determining the additional surcharge for FY 2020-21.

The Commission in its Order dated August 29, 2019 while determining the additional surcharge in accordance with the provisions of UERC (Terms and Conditions of intra–State Open Access) Regulations, 2015 to meet the fixed cost of UPCL arising out of its obligation to supply electricity to the open access consumers for the period 01.10.2019 till 31.03.2020 had laid down the principle for determining the additional surcharge and had also directed UPCL as under:

"UPCL is hereby directed to file all future Petitions for levy of additional surcharge on open access consumers for the period April to September of the financial year based on the data of the corresponding previous period by 31st December and for the period October to March of the financial year based on the data of the corresponding previous period by 30th June of the same financial year."

In this regard, UPCL has already filed the Petition and the Commission shall determine the additional surcharge in due course of time.

6. Review of Commercial Performance of UPCL

6.1 General

Uttarakhand, the 27th State of India was created on 09.11.2000 as the 10th Himalayan State of the country blessed with abundant natural resources with an approx. 53,483 sq. km area and presently having a population of approximately 104.27 Lakh. The electricity distribution network is managed by Uttarakhand Power Corporation Limited (UPCL) the sole distribution licensee in the State. UPCL had been entrusted to cater to the transmission & distribution sector inherited after the de-merger from UPPCL (erstwhile UPSEB) since 01.04.2001. The Electricity Act, 2003 mandated the separation of Transmission functions under Power Sector Reforms. Consequently, on 01.06.2004, the Power Transmission Corporation Limited (PTCUL) was formed to maintain & operate EHV transmission lines & substations in the State.

Today UPCL, the sole power distribution utility in the State caters to the sub–transmission & distribution network which includes substations & distribution lines in 13 districts of Uttarakhand namely Dehradun, Pauri, Tehri, Uttarkashi, Rudraprayag, Chamoli, Haridwar, Pithoragarh, Bageshwar, Almora, Nainital, Champawat & Udhamsingh Nagar, details of which are given below in Table 6.1 & 6.2.

Table 6.1: Detail of Substations (S/s) maintained by UPCL as on 31.12.2019

S.No.	Name of District	#66/11 kV S/s			33/11 kV S/s			11/0.415 kV S/s	
		Nos.	No. of Transformers	Total MVA capacity	Nos.	No. of Transformers	Total MVA capacity	Nos.	Total MVA capacity
Garhwal Zone									
1.	Dehradun				62	123	1018.50	8143	915.35
2.	Uttarkashi				11	20	88.15	1808	84.04
3.	Pauri				31	50	230.00	5942	272.15
4.	Tehri				14	27	150.00	3904	153.23
5.	Chamoli	3	5	38	16	23	114.00	2087	80.49
6.	Rudraprayag				7	8	51.00	1803	59.29
Total Garhwal Zone		**3**	**5**	**38**	**141**	**251**	**1651.65**	**23687**	**1564.55**
Haridwar Zone									
7	**Haridwar**	**1***	**2**	**30**	**62**	**130**	**1199**	**18567**	**1109.05**
Kumaon Zone									
8.	Nainital				30	53	392.00	5929	532.77
9.	U.S.Nagar (Kashipur, Bazpur Jaspur)				22	48	394.50	6758	388.17
10.	Almora				26	45	160.00	4164	153.51
11.	Bageshwar				9	13	47.50	1737	56.54
Total Kumaon Zone		**0**	**0**	**0**	**87**	**159**	**994**	**18588**	**1130.99**
Rudrapur Zone									
12.	U.S.Nagar (Rudrapur, Sitarganj)				32	67	621.50	9164	538.05
13.	Pithoragarh				18	29	130.50	3583	122.07
14.	Champawat				7	11	47.00	1561	63.93
Total Rudrapur Zone		**0**	**0**	**0**	**57**	**107**	**799**	**14308**	**724.052**
Total UPCL		**4**	**7**	**68**	**347**	**647**	**4643.65**	**75150**	**4528.64**

**Now transferred to PTCUL, # As per the Commission's Order the complete 66 kV network is to be handed over by UPCL to PTCUL by 31.12.2021*

Table 6.2: Detail of Lines maintained by UPCL as on 31.12.2019

S.No.	Name of District	#66 kV Line (In Km.)	33 kV Line (In Km.)	11 kV Line (In Km.)	LT Line (In Km.)
Garhwal Zone					
1.	Dehradun		763.18	4699.24	11310.19
2.	Uttarkashi		303.30	2169.52	2547.44
3.	Pauri		606.44	5340.37	8694.83
4.	Tehri		364.40	4244.75	6586.47
5.	Chamoli	121	335.34	2409.71	3179.32
6.	Rudraprayag		136.19	1264.59	1787.58
Total Garhwal Zone		**121**	**2508.85**	**20128.18**	**34105.83**
Haridwar Zone					
7.	**Haridwar**	***0.6**	**672.828**	**4606.264**	**6222.52**
Kumaon Zone					
8.	Nainital	0	418.46	2955.51	4715.60
9.	U.S.Nagar (Kashipur, Bazpur Jaspur)	0	283.17	1741.38	1857.26
10.	Almora	0	492.65	3893.52	6827.84
11.	Bageshwar	0	185.78	1670.14	2205.27
Total Kumaon Zone		**0**	**1380.07**	**10260.55**	**15605.96**
Rudrapur Zone					
12.	U.S.Nagar (Rudrapur, Sitarganj)		416.00	2596.40	3289.11
13.	Pithoragarh	**68.5	306.67	3137.32	3809.17
14.	Champawat		141.00	1754.53	2374.93
Total Rudrapur Zone		**68.5**	**863.67**	**7488.25**	**9473.21**
Total UPCL		**190.1**	**5425.40**	**42483.24**	**65407.52**

** Now transferred to PTCUL, **15 Km. Charged on 33 KV, # As per the Commission's Order the complete 66 kV network is to be handed over by UPCL to PTCUL by 31.12.2021*

Further, on examination of the details of sub-stations and lines maintained by UPCL as on 31.12.2019 vis-a-vis as on 31.12.2018, it has been observed that UPCL was able to increase its total transformation/sub-station capacity and total line length by 722 MVA and 2,480 Kms. respectively in last one year as detailed below:

Table 6.3: Increase in Assets maintained by UPCL as on 31.12.2019 vis-a-vis 31.12.2018

Description	33 kV	11 kV	LT	Total
Substation capacity as on 31.12.2018 (in MVA)	4283	4167	-	8450
Substation capacity as on 31.12.2019 (in MVA)	4644	4529	-	9172
Net Increase in Substation Capacity (in MVA)	361	361	-	722
Line length as on 31.12.2018 (in Km)	5172	42112	63552	110836
Line length as on 31.12.2019 (in Km)	5425	42483	65408	113316
Net Increase in line length (in Km)	**253**	**371**	**1856**	**2480**

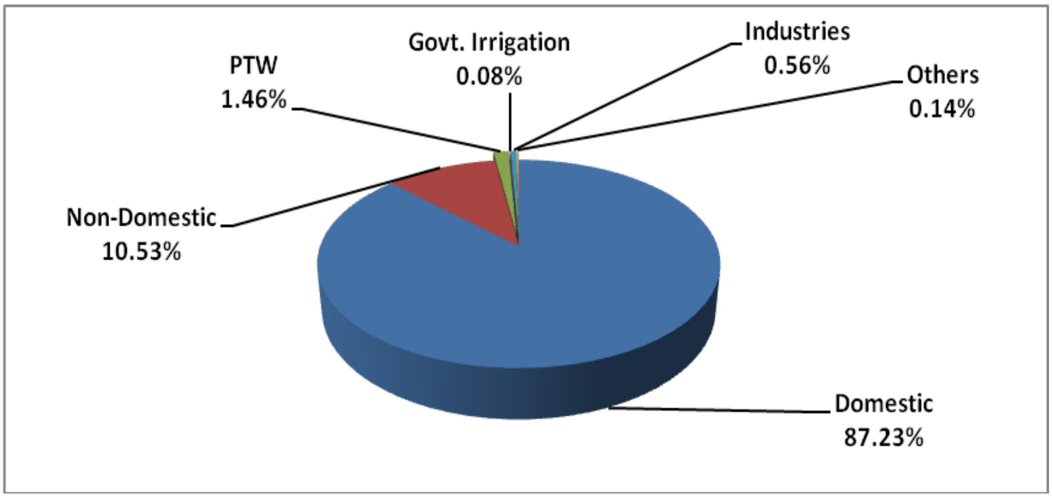
The Distribution network of UPCL as on 31.12.2019 contains four Zones namely Garhwal, Haridwar, Kumaon & Rudrapur having total twelve Circles containing 43 Divisions. The new Circle which has been formed in FY 2019-20 upto 31.12.2019 is Karanprayag having divisions namely

Rudraprayag, Gairsain, Gopeshwar & Narayanbagar. The State has a distinct advantage over other comparable States as a small number of consumers consume major share of power for which a Key Consumer Cell (KCC) has been constituted. Hence, a large portion of revenue of the Petitioner comes from these KCC consumers. There were 22.25 Lakh consumers as on 31.03.2018 which have increased to 24.27 Lakh consumers as on 31.03.2019 as per CS-3 reports for March, 2018 & March, 2019 respectively. This increase of total 2,01,878 consumers during the year was primarily in Domestic category (90.71%) due to Saubhagya Scheme launched by the Central Government. The Consumer Mix, Consumption pattern & Revenue pattern for FY 2017-18 & FY 2018-19 are elaborated below:

6.1.1 *Consumer Mix during FY 2017-18 & FY 2018-19*

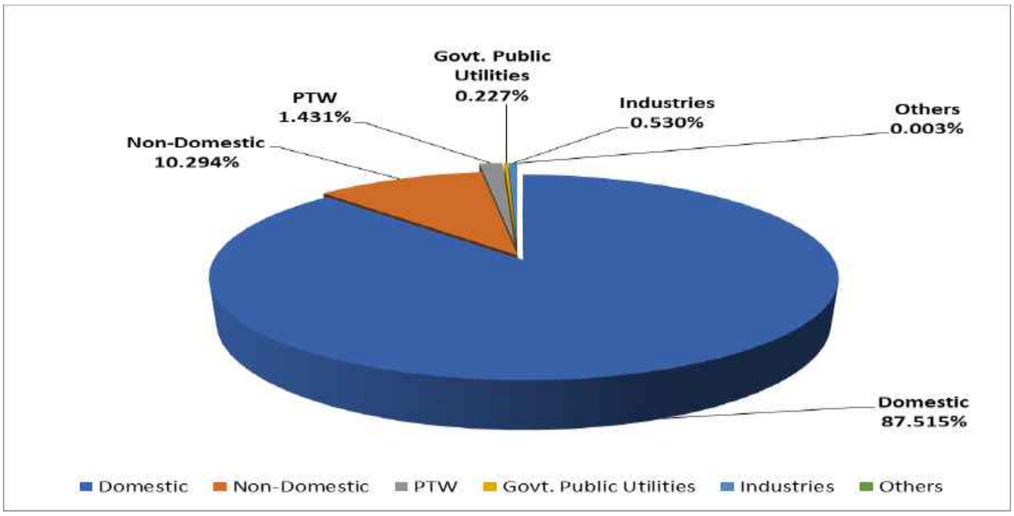
In FY 2017-18, out of the total approximately 22.25 Lakh consumers in the State, there were 87.23%-Domestic consumers, 10.53%-Non-Domestic consumers and only 0.56% consumers in the Industrial category. It is seen that these industrial (HT+LT Industries) consumers accounted for around 54.96% of the total consumption of the State and contribute to about 61.21% of Petitioner's revenue. The following Chart depicts the consumer mix in the State during FY 2017-18.

CHART 1: Consumer Mix (FY 2017-18)



In FY 2018-19, out of the total approximately 24.27 Lakh consumers in the State, there were 87.52%-Domestic consumers, 10.29%-Non-Domestic consumers and only 0.53% consumers of the Industrial category. It is seen that these industrial (HT+LT Industries) consumers accounted for around 56.36% of the total consumption of the State and contributed about 61.69% of the Petitioner's revenue. The following Chart depicts the consumer mix in the State during FY 2018-19.

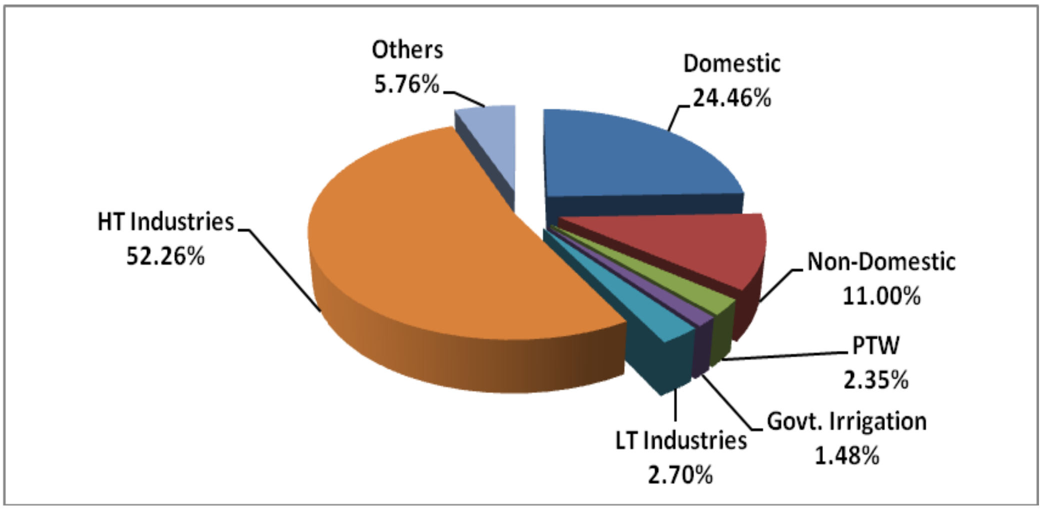
CHART 2: Consumer Mix (FY 2018-19)



6.1.2 *Consumption Pattern during FY 2017-18 & FY 2018-19*

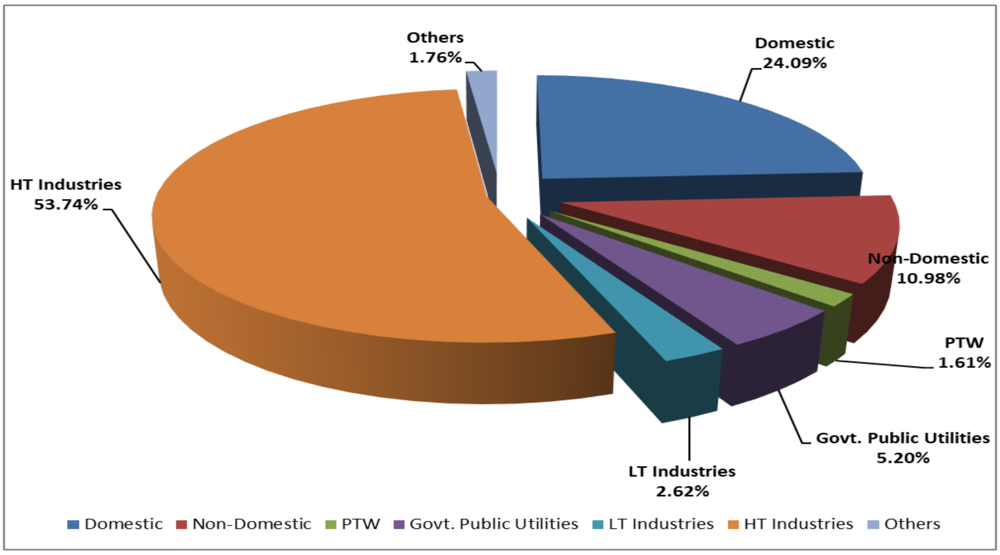
In FY 2017-18, it was observed that with respect to total consumption of the State, the consumption of Industrial consumers (HT+LT Industries) was 54.96% and the consumption of Domestic & Non-Domestic consumers was 24.46% & 11.00% respectively. The following Chart shows the consumption pattern in the State during FY 2017-18.

CHART 3: Consumption Pattern during FY 2017-18



In FY 2018-19, it was observed that with respect to total consumption of the State, the consumption of Industrial consumers (HT+LT Industries) was 56.36% and the consumption of Domestic & Non-Domestic consumers was 24.09% & 10.98% respectively. The following Chart shows the consumption pattern in the State during FY 2018-19.

CHART 4: Consumption Pattern during FY 2018-19



Comparison of consumption pattern in FY 2017-18 & FY 2018-19 depicts that percentage share of Industrial consumption has slightly increased by 1.40%, whereas, percentage share of domestic consumption has decreased by 0.37% and the percentage share of non-domestic consumption has decreased by 0.02%.

With regard to the increase in energy consumption of Industrial consumers, the Commission has observed that as industries are subsidising consumers and any reduction in revenue from industries would affect the commercial viability of distribution business, therefore, the Petitioner should ensure the quality and reliability of power supply at competitive rates to its consumers otherwise the consumers would be utilising the option of Open Access for meeting their demand at market rates from the Power Exchanges. Earlier, the quantum of power traded through exchanges (Open Access) by the embedded Open Access consumers was increasing on year on year basis upto FY 2017-18. However, during last two years there is a decrease in the quantum of power traded through Open Access as detailed in the Table below:

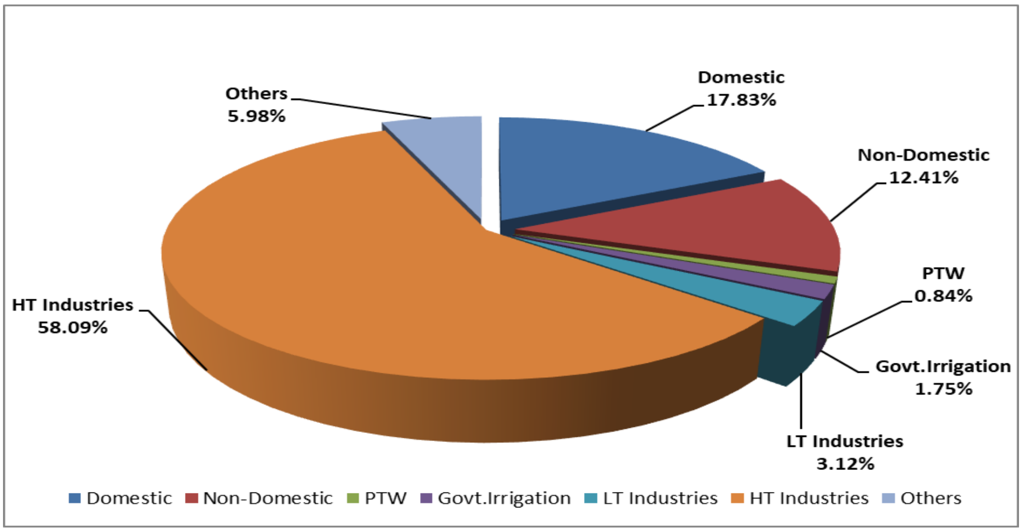
Table 6.4: Quantum of Power Traded through Open Access (at NR periphery)

Year	Quantum (MU)
FY 2012-13	100.93
FY 2013-14	281.03
FY 2014-15	181.37
FY 2015-16	274.52
FY 2016-17	385.81
FY 2017-18	440.37
FY 2018-19	249.66
FY 2019-20 (upto Feb, 2020)	253.16

6.1.3 *Revenue Pattern during FY 2017-18 & FY 2018-19*

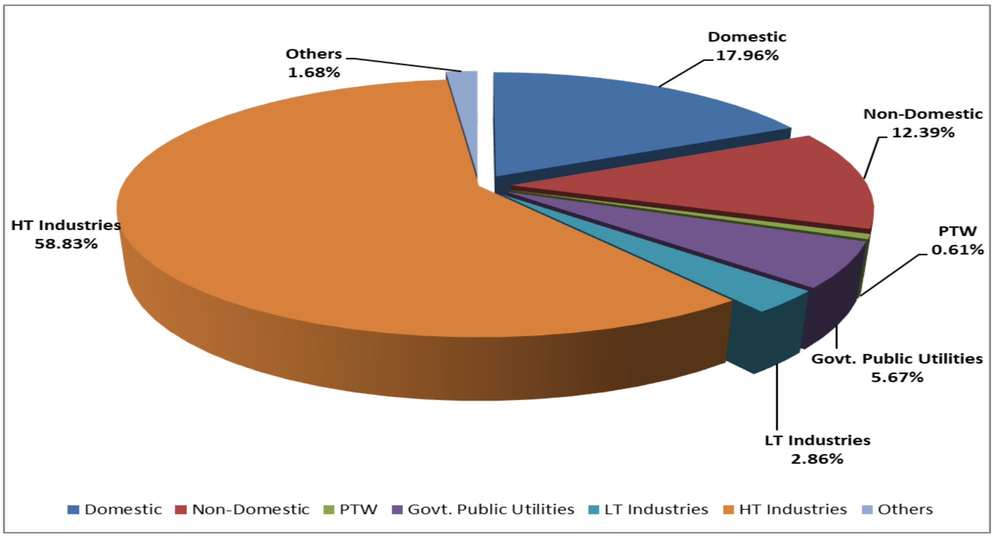
With regard to the revenue from sale of energy during FY 2017-18, the contribution of Industrial consumers was 61.21% [HT Industrial consumers was 58.09%, LT industrial consumers was 3.12%] whereas Domestic consumers and Non-Domestic consumers were contributing around 17.83% & 12.41% respectively. The following Chart shows the Revenue Pattern of various consumer categories in the State.

CHART 5: Revenue Mix in FY 2017-18



With regard to the revenue from sale of energy during FY 2018-19, the contribution of Industrial consumers was 61.69% [HT Industrial consumers was 58.83%, LT industrial consumers was 2.86%] whereas Domestic consumers and Non-Domestic consumers were contributing around 17.96% & 12.39% respectively. The following Chart shows the Revenue Pattern of various consumer categories in the State.

CHART 6: Revenue Mix in FY 2018-19



On comparing the revenue pattern of FY 2017-18 and FY 2018-19, it is noticed that the percentage share of revenue from Industrial Consumers & Domestic Consumers with respect to the total revenue had slightly increased by 0.48% & 0.13% respectively. This is a healthy signal that percentage revenue from the both subsidising as well as subsidised category of consumers, i.e. Industrial Consumers and Domestic Consumers has slightly increased in FY 2018-19 indicating impact of lower cross subsidies.

6.2 Commission's Analysis and Directions on Commercial Performances

The Commission has been monitoring & reviewing the performance of the Petitioner based on the information/reports submitted by it. Infact, higher distribution losses in distribution system are detrimental to financial and commercial viability of the Petitioner. Therefore, analysis of Petitioner's performance especially in respect of metering, billing and revenue collection is vital with the focus on reducing the Aggregate Technical and Commercial (AT&C) losses of the Petitioner. The Commission from its very first Tariff Order has been issuing various directions/Orders in this regard from time to time. However, the Petitioner has always been non-compliant. The Commission had, therefore, decided to monitor the commercial performance of the Petitioner in a more structured manner on a monthly basis and, accordingly, various formats were issued to the Petitioner vide the Commission's letter No. 284 dated 17.05.2012 with the direction to submit the above information in these Formats regularly for each month by 15th day of the next month.

Despite, the specific directions issued by the Commission in its previous Tariff Orders, the Petitioner had neither been submitting the periodical reports timely nor in accordance with the prescribed formats.

Considering the fact that the Petitioner encompasses 35 (now 43) number of Distribution Divisions in the State at that period of time, the Commission felt the need to monitor UPCL on Distribution Division basis and to quantify the improvement on month on month basis of any of the performance indicators, it would be necessary that Division-wise targets on each parameter be provided by the licensee which would make the whole monitoring process more meaningful. Hence, the Commission vide its letter No. 1622 dated 27.11.2014 issued following revised Commercial Performance Monitoring formats directing UPCL to submit information on these formats in hard as well as in soft copy (MS-excel file in CD) on regular basis latest by 25th day of the next month from January, 2015 onwards.

Table 6.5: Revised Formats prescribed by the Commission vide letter dated 27.11.2014

S. No.	Description	Format
1.	No. of Consumers	1
2.	Quarterly Targets of NA/NR/IDF/ADF/RDF	2
3.	Status of Not Accessible (NA) Consumers (in Percentage)	2(A)
4.	Status of Not Read (NR) Consumers (in Percentage)	2(B)
5.	Status of Identified Defective Meters (IDF) (in Percentage)	2(C)
6.	Status of Appeared Defective Meters (ADF) (in Percentage)	2(D)
7.	Status of Reading Defective Meters (RDF) (in Percentage)	2(E)
8.	Quarterly Targets of IDF Meters/Mechanical Meters/Un-metered Consumers/Ghost Consumers	3
9.	Status of Identified Defective Meters (IDF)	3(A)
10.	Status of Un-metered Consumers	3(B)
11.	Status of Mechanical Meters	3(C)
12.	Status of Ghost Consumers	3(D)
13.	Status of Not Billed (NB)/Stop Billed (SB) Cases	4
14.	Status of Outstanding Arrears	5
15.	MRI Status of KCC Consumers	6
16.	Status of Revenue realisation per unit of Energy Sold	7
17.	Status of AT&C Losses of UPCL	8

However, the Commission observed that the Distribution Licensee has been inconsistent in furnishing the Commercial Performance Monitoring reports on the aforesaid formats in hard as well as in soft copy (MS-excel file in CD) on regular basis in accordance with the directions, i.e. latest by 25th day of the next month.

The Commission observed that the Petitioner has not only been inconsistent in furnishing the Commercial Performance Monitoring reports within the stipulated time frame but also has failed to submit Format - 2 & Format- 3 alongwith the report of the first month of the Financial Year, i.e. alongwith the report of April, 2019. The Commission has observed that despite categorically mentioning in the guidelines of the prescribed Formats regarding submission of Quarterly Targets in the first month of the Financial Year, i.e. April, 2019, the Petitioner submitted the Quarterly Targets in Format-2 & Format-3 to the Commission vide its letter no. 2553 dt. 09.08.2019. Further, the Commission has observed that the Petitioner is furnishing its monthly Commercial Performance Monitoring reports after a delay of more than 03 months.

In this regard, the Commission is of the view that the basic purpose of advance target setting for each quarter is to enable analysis of actual performance vis-a-vis target performance of the licensee. In the absence of advance target setting, comparative analysis is rendered impossible which clearly shows a lackadaisical approach of the Petitioner towards compliance of the provisions of the Act/Regulations and directions of the Commission.

Therefore, the Commission again directs Petitioner to submit monthly Commercial Performance Monitoring reports strictly in the prescribed formats on regular basis, so as to reach the Commission latest by 25th day of the following month and furnish the Quarterly Targets as per prescribed Format - 2 & 3 alongwith the Commercial Performance Monitoring report for the month of April, 2020.

The Commission's analysis on the information submitted by the Petitioner for the period 01.04.2019 to 31.12.2019 through its various submissions is being discussed in the following paragraphs:

6.2.1 *Metering*

The Commission in its earlier Tariff Orders had been repeatedly giving directions to the Petitioner to energise new connections with the static/electronic meters and to replace all old mechanical meters with new electronic/static meters in accordance with CEA Regulations.

The reports pertaining to various performance parameters on metering and other issues have been analysed and findings thereof are being discussed below:

6.2.1.1 Replacement of Improper, Non-Functional, Stop/Stuck up defective meters (referred to as Identified defective meters (IDF))

In this regard, the Commission vide its Tariff Order dated 27.02.2019 had directed the Petitioner to restrict percentage defective meters (IDF) to 3% in plain as well as in hilly areas of the State upto 30.06.2019, failing which the concerned officers of the licensee shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated.

With regard to compliance of the directive, the Petitioner has submitted the information as follows:

1. **Quarterly Target of IDF cases for FY 2019-20**

Table 6.6: Quarterly Target of IDF cases for FY 2019-20

Particulars	At the end of Q-1	At the end of Q-2	At the end of Q-3	At the end of Q-4
IDF cases	2.95%	2.58%	2.24%	2.07%

2. **Status of Defective Meters (IDF) as on 31.12.2019**

Table 6.7: Status of Defective Meters (IDF) as on 31.12.2019

As on	% Defective Meters
31.03.2018	3.37%
31.03.2019	3.52%
31.12.2019	4.21%

On examination of the submissions made by the Petitioner, it has been observed that the Petitioner has submitted two different figures of percentage Defective Meters (IDF), i.e. 4.52% in compliance of directives report (letter dated 15.01.2020) and 4.21% in Commercial Performance Monitoring Report (letter dated 12.03.2020). The Commission cautions the licensee that such practices should be strictly avoided and this should not be repeated in future.

On further examination of the Quarterly Targets submitted by UPCL in Format-2, it is observed that the target set for IDF cases at the end of 1st & 2nd quarter of FY 2019-20 were 2.95% & 2.58% respectively against which UPCL achieved IDF percentage of 3.10% & 2.61% at the end of 1st

& 2nd quarter of FY 2019-20, however, the percentage of IDF meters as on December, 2019 is more than what was in the starting of FY 2019-20.

Taking a strong exception, the Commission is of the view that the Petitioner indeed requires improvement at division level in order to reduce provisional billing cases and aim for achievement of overall target set for Provisional Billing cases, i.e. NA/NR, RDF/ADF/IDF cases in the State in accordance with the Orders of the Commission.

Circle-wise number of defective meters reported by the Petitioner in the prescribed format 3(A) is shown in the Table given below:

Table 6.8: Status of Defective Meters

S. No.	Name of Circle	No. of Defective Meters as on 31.03.2016	No. of Defective Meters as on 31.03.2017	No. of Defective Meters as on 31.03.2018	No. of Defective Meters as on 31.03.2019	No. of Defective Meters as on 31.12.2019	% of Defective Meters as on 31.12.2019
1.	EDC Dehradun (R)	5868	5094	3926	5572	9286	3.57%
2.	EDC Roorkee	7366	6668	4604	5599	9386	5.32%
3.	EDC Haridwar	4552	3480	2237	7561	5219	2.35%
4.	EDC Srinagar	34056	27986	20807	17725	25478	6.56%
5.	EDC Dehradun	770	809	565	1503	5242	4.37%
6.	EDC Kashipur	996	1064	839	7980	5270	3.18%
7.	EDC Rudrapur	7290	6320	5223	6719	10749	4.18%
8.	EDC Ranikhet	12434	14059	11608	9512	8352	3.77%
9.	EDC Haldwani	6246	4044	2361	4058	11189	5.71%
10.	EDC Tehri	16366	12666	8019	6327	4215	2.05%
11.	EDC Pithoragarh	16963	12494	8057	4906	4605	3.39%
Total		**112907**	**94684**	**68246**	**77462**	**98991**	**4.21%**

From the above Table, it can be seen that the number of defective meters has increased by 21,529, i.e. 77462 defective meters as on 31.03.2019 to 98991 defective meters as on 31.12.2019. The directions of the Commission has not been taken seriously at the Petitioner's end due to which as on 31.12.2019 the percentage defective meters in UPCL's network were 4.21 % of the total number of billed consumers, i.e. 21,27,651 as on the aforesaid date.

It is an admitted fact that by expeditious replacement of defective meters on the basis of well laid down defective meter replacement programme, the Petitioner will not only be able to control this menace but will also comply with the provisions of SOP Regulations.

Moreover, on examination of actual progress made in the field as on 31.12.2019, it has been observed that in only 13 divisions out of total 43 divisions in the State as on 31.12.2019, the Petitioner was able to achieve actual IDF cases percentage below the target level of 3%. The

Petitioner should put all its efforts for reducing the IDF cases below 3% in other Divisions as well so that Provisional Billing cases can be minimized and revenue can be enhanced.

Therefore, the Commission again directs the Petitioner to restrict percentage defective meters (IDF) to 3% in plain as well as in hilly areas of the State by 30.06.2020, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) and Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated.

6.2.1.2 Replacement of Mechanical Meters

The Commission vide its Order dated 27.02.2019 had directed the Petitioner to ensure complete replacement of mechanical meters by electronic meters well before 30.06.2019, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations would be initiated. From Format-3, i.e. quarterly targets of mechanical meters, it is observed that UPCL had targeted to replace all the mechanical meters by electronic meters by 31st December 2019, which shows that the Petitioner has not only failed in achieving the targets set by the Commission for replacement of mechanical meters by 30.06.2019 but has also failed to even meet the targets set by itself.

The status of mechanical meters furnished by the Petitioner in the prescribed format 3 (C) is given below.

Table 6.9: Status of Mechanical Meters

Status	As on 31st March 2014	As on 31st March 2015	As on 31st March 2016	As on 31st March 2017	As on 31st March 2018	As on 31st March 2019	As on 31st Dec 2019
Balance Mechanical Meters to be replaced by Electronic Meters	183005	152560	127074	113499	71382	48224	19450

From the above Table, it is observed that only 28,774 mechanical meters were replaced in FY 2019-20 (upto 31.12.2019) while as per the direction of the Commission issued in its Tariff Order dated 27.02.2019, the Petitioner was required to replace all 54,576 mechanical meters (as on 31.12.2018) by 30.06.2019, whereas, still 19450 number of mechanical meters are to be replaced.

It is an established fact that by replacing the mechanical meters with electronic meters, the Petitioner will not only comply with the prevailing SOP Regulations but will be able to record its energy supplied more accurately/precisely and, thus, billed energy. Therefore, the Petitioner will have an incentive in terms of increase in its revenue if it takes all necessary steps for replacing all remaining mechanical meters including those not covered under R-APDRP/IPDS/DDUGJY funded schemes in a planned and time-bound program.

The Commission is of the view that the Petitioner cannot absolve itself from complying with the provisions of the CEA Regulations on meters and directives issued by the Commission in this regard from time to time.

The Commission directs the Petitioner to ensure complete replacement of Mechanical Meters by Electronic Meters well before 30.09.2020, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/ Regulations would be initiated.

6.2.2 *Billing*

The Commission, vide its earlier Tariff Orders, and various directions issued from time to time in this regard has been directing the Petitioner to improve its quality of billing, bill distribution and revenue collection system. It is noted that the Petitioner has made a beginning in this direction and has developed a system for internet based online view/payment of electricity bill besides bill payment facility also through Common Service (CSCs) situated across the State for its consumers which has not only benefitted the consumers of the State but has also improved the overall billing and bill collection system of the Petitioner. However, the Commission is of the view that still a majority of consumers are located in remote hilly/rural areas and they may not avail internet based online facilities, hence, a lot of efforts for improvement in billing, bill distribution and bill collection system is required at the Petitioner's end for consumers residing in such areas.

6.2.2.1 Provisional Billing: Status of NA/NR, IDF/ADF/RDF

The Commission vide its Tariff Order dated 27.02.2019, had issued directions to the Petitioner to reduce the percentage NA/NR cases to below 2% in the entire State latest by 30.09.2019, failing which the concerned Chief Engineer (Distribution), Superintending Engineer

(Distribution), Executive Engineer (Distribution) & Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/ Regulations may be initiated.

With regard to the compliance of the directives, the Petitioner has submitted the following information: -

1. **Quarterly Target of NA/NR for FY 2019-20 submitted by UPCL in Format-2**

Table 6.10: Quarterly Target of NA/NR for FY 2019-20 submitted by UPCL in Format-2

Particulars	At the end of Q-1	At the end of Q-2	At the end of Q-3	At the end of Q-4
NA cases	3.72%	2.77%	1.82%	1.07%
NR cases	4.62%	3.21%	2.18%	0.87%

2. **Status of NA/NR submitted in Commercial Performance Monitoring Report**

Table 6.11: Status of NA/NR submitted in Commercial Performance Monitoring Report

Particulars	NA Cases	NR Cases	Total NA/NR
As on 31.03.2018	3.54%	4.64%	8.18%
As on 31.03.2019	4.25%	4.16%	8.41%
As on 31.12.2019	2.46%	4.83%	7.29%

On examination of the submissions made by the Petitioner, it has been observed that the Petitioner has submitted two different figures of percentage NA/NR cases, i.e. 2.24%/3.03% and 2.46%/4.83% in compliance of Directives Report (letter dated 15.01.2020) and in Commercial Performance Monitoring Report (letter dated 12.03.2020) respectively. The Commission cautions the licensee that such practices should be strictly avoided, and this should not be repeated in future.

On examination of Quarterly Targets furnished by UPCL vis-a-vis actual progress made in the field as on 31.12.2019, it has been observed that UPCL was not able to comply with the directions of the Commission to bring NA/NR cases below 2% in the entire State by 30.09.2019, but has also failed to achieve its own Quarterly Targets by the end of 3rd Quarter of FY 2019-20. It is observed that the Petitioner was unable to reduce NA/NR cases to below 2% in any of the Divisions by 30.09.2019 which shows that the Petitioner has shown lackadaisical approach in reducing NA/NR cases.

Hence, the Commission is of the view that the Petitioner requires improvement at each division level in order to reduce the NA/NR cases and aim for achievement of overall target in accordance with the Orders of the Commission. Therefore, UPCL is required to diligently monitor

& pursue each Distribution Division rigorously so as to align its actual percentage of NA/NR billing with the targets specified in the Commission's Orders/directions.

Moreover, NA/NR cases alone are around 7.29% which reflects abysmal performance of the Petitioner in bringing down the provisional billing percentage in the State. Therefore, **the Commission again directs the Petitioner to put in its sincere efforts in reducing the percentage NA/NR cases to below 2% in the entire State latest by 30.09.2020, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) & Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/ Regulations would be initiated.**

The Commission has observed that the percentage of provisional billing cases namely NA/NR, RDF/ADF/IDF, furnished in prescribed formats 2(A), 2(B), 2(C), 2(D) & 2(E) for FY 2019-20 are still at an alarmingly high levels vis-a-vis total number of billed consumers as shown in the Table given below:

Table 6.12: Status of Provisional Billing viz. NA/NR/IDF/ADF/RDF

Status	As on 31st March 2015	As on 31st March 2016	As on 31st March 2017	As on 31st March 2018	As on 31st March 2019	As on 31st Dec 2019
NA (%)	4.09	3.19	3.27	3.54	4.25	2.46
NR (%)	4.79	2.85	2.10	4.64	4.16	4.83
IDF (%)	7.59	6.22	4.94	3.37	3.52	4.21
ADF (%)	0.35	0.00	0.00	0.00	0.00	0.00
RDF (%)	1.62	1.34	1.02	0.98	1.95	1.28
Total (%)	**18.44**	**13.6**	**11.33**	**12.53**	**13.88**	**12.78**
Total Billed Consumers (Nos.)	**17,42,507**	**18,15,454**	**19,15,855**	**20,24,578**	**22,03,032**	**23,49,169**

From the above Table, it is observed that there has been an insignificant reduction in total percentage of NA/NR, IDF/ADF/RDF cases in FY 2019-20 (upto 31.12.2019) which is not at all close to the directions issued by the Commission in its previous Tariff Order. **Therefore, the Commission again directs the Petitioner to restrict the provisional billing cases within the limit prescribed above in the respective paras of IDF and NA/NR cases.**

6.2.2.2 NB & SB Cases

The Commission, in its Tariff Order dated 27.02.2019, had taken a considerate view and had directed the Petitioner to liquidate and finalise atleast 5% of the NB/SB cases in each quarter and submit quarterly report before the Commission. In absence of the same, action under the provisions of Act/Rules/Regulations may be initiated against the Petitioner.

The Petitioner's submission in the prescribed Format-4 of Commercial Performance Monitoring Report pertaining to Not Billed (NB) and Stop Billed (SB) is as shown in the Table given below:

Table 6.13: Status of NB/SB Cases

<table>
<tr><th colspan="2">Status</th><th>As on 03/15</th><th>As on 03/16</th><th>As on 03/17</th><th>As on 03/18</th><th>As on 03/19</th><th>As on 12/19</th></tr>
<tr><td rowspan="2">No. of NB/SB Cases</td><td>NB</td><td rowspan="2">144480</td><td rowspan="2">152485</td><td rowspan="2">166877</td><td rowspan="2">160409</td><td rowspan="2">161500</td><td rowspan="2">161393</td></tr>
<tr><td>SB</td></tr>
</table>

From the above Table, it is evident that instead of reduction, such cases has increased vis-a-vis March 2018 and has shown marginal reduction in FY 2019-20 (upto 31.12.2019) w.r.t. the cases as on March, 2019, which indicates that the Petitioner has shown least interest in reducing these NB/SB cases. In this regard, earlier the Commission had categorically directed the Petitioner to liquidate and finalise atleast 5% of such cases in each quarter, whereas, the trend shows no significant improvement in the status which clearly indicates that the Petitioner has failed to comply with the direction of the Commission.

Therefore, taking a serious note on the continued non-compliance by the Petitioner with regard to non-liquidation and finalisation of NB/SB cases, **the Commission again directs the Petitioner to liquidate and finalise atleast 5% of the NB/SB cases in each quarter and submit quarterly report before the Commission. In absence of the same, action under the provisions of Act/Rules/Regulations may be initiated against the Petitioner.**

6.2.2.3 Outstanding Arrears

The Commission in its Tariff Order dated 27.02.2019 had directed the Petitioner to make sincere efforts in mobilizing its resources throughout the year for collection of arrears under a structured receivable management programme besides taking corrective actions against the habitual defaulters.

In compliance to the directives, the Petitioner vide its letter dated 15.01.2020 has submitted that it has revised the division wise targets of billing efficiency, collection efficiency, AT&C Losses and revenue collection for FY 2019-20, the summary of which is as follows:

- Input Energy : 14,273.83 MU
- Billed Energy : 1205.03 MU
- Assessment including Electricity Duty, Green Energy Cess and Delayed Payment Surcharge : Rs. 7423.27 CR.
- Collection including Electricity Duty, Green Energy Cess and Delayed Payment Surcharge : Rs. 7423.27 CR
- Billing Efficiency : 87.61%
- Collection Efficiency : 100%
- AT& Losses : 12.39%
- Collection per Input Energy : Rs. 5.20 p.u.

The Petitioner further submitted that monitoring of above collection targets is being done at Corporate Office and on the basis of energy received during the previous month, revenue collection targets for the next month are being communicated to the field units by Corporate Office.

Besides above, the Petitioner vide its letter no. 4542/MD/UPCL/I-7, dated 01.05.2019 also submitted that it has fixed the monthly targets of the Officers at various levels for checking of consumers, study of consumers as vigilance checks.

With regard to the recovery of outstanding arrears, the Petitioner vide its various submissions has also submitted that connections of defaulting consumers are being disconnected and notices under Section 3 & 5 of the Uttarakhand (UP Government Electricity Undertakings (Dues Recovery) Act, 1958) Adaptation and Modification order, 2002 are being issued regularly and the same shall be taken-up more promptly for ensuing early recovery of outstanding arrears.

The status of outstanding arrears furnished by the Petitioner in the prescribed Format- 5 is given below:

Table 6.14: Status of Outstanding Arrears

Description	As on 03/16		As on 03/17		As on 03/18		As on 03/19		As on 11/19	
Arrear	**No.**	**Amount (Rs. Lakh)**	**No.**	**Amount (Rs. Lakh)**	**No.**	**Amount (Rs. Lakh)**	**No.**	**Amount (Rs. Lakh)**	**No.**	**Amount (Rs. Lakh)**
Arrear>=5 Lac	1400	66890	1161	45682	1430	59586	1583	65543.38	2098	83276.08
1=<Arrear<5 Lac	3079	5345	3555	6131	4028	7180	6246	10469.05	7524	12846.00
0.5 Lac=<Arrear<1 Lac	11749	8106	13164	9214	10326	7226	16302	11235.01	18318	12512.74
0.1 Lac=<Arrear<0.5 Lac	84165	17474	89984	18867	70715	14876	124701	26733.65	145884	31197.25
0.05 Lac=<Arrear<0.1 Lac	67004	4761	78657	5563	58949	4173	96743	6897.61	118600	8432.75
Total	**167397**	**1025767**	**186521**	**85457**	**145484**	**93042**	**245575**	**120878.71**	**292424**	**148265**

From the above Table, it is evident that the Petitioner has not been able to reduce number of arrear cases and rather the same are increasing on year-on-year basis and has reached to an all time high of 2,92,424 in FY 2019-20 (upto 31.11.2019).

The Commission is of the view that the Petitioner has been lackadaisical towards collection of arrears and lacks seriousness in laying down a planned programme/roadmap. This is a grave concern for the financial health of the Petitioner and may weed away the Petitioner's financial viability since 2.92 Lakh cases of arrears (which is around 12.43% of the total consumers of the Petitioner) have been pending as on 31.12.2019 with a staggering amount of Rs. 1,482.65 Crore. This amount is about 22.63% of the Petitioner's approved Net ARR for FY 2019-20, i.e. Rs. 6,549.39 Crore.

The comparison of outstanding arrears furnished by the Petitioner in the above Table vis-a-vis outstanding arrears shown in the Commercial Diary, i.e. CS-4 is given below:

Table 6.15: Re-Conciliation of Pending Arrears submitted by UPCL

Figures in Rs. Crore

Description	As on 31.03.2016	As on 31.03.2017	As on 31.03.2018	As on 31.03.2019	As on 30.11.2019
As per Commercial Performance Monitoring report (for KCC Consumers) *(excluding Arrears of amount below Rs. 5,000)*	1025.77	854.57	930.41	1208.78	1,482.65
As per CS-4 report (for UPCL in Total) *(including Arrears of amount below Rs. 5,000)*	1789.05	1613.26	1622.62	1731.08	2491.47

From the above Table, it is observed that the Petitioner has not made serious efforts in recovering its arrears in FY 2019-20 (upto 30.11.2019) due to which the total arrear to be realized as on 30.11.2019 as per CS-4 report is Rs. 2491.47 Crore which is approx. 38.04% of its approved Net ARR for FY 2019-20. Moreover, on examination of CS-4 Reports as mentioned in Table above, it has been observed that the performance of the Petitioner has further deteriorated in FY 2019-20 (upto 30.11.2019) as the amount of arrears instead of decreasing in FY 2019-20 (upto 30.11.2019) has actually increased by 22.65% which shows that the Petitioner has not taken enough measures for early recovery of the arrears.

The Commission is of the view that the Petitioner has to understand the gravity of the situation and should abstain from its legacy practice of remaining callous about arrears throughout the year and waking up in the last quarter of the Fiscal Year. This by all standards in any commercial organization is an in-appropriate practice and inculcates un-professional work culture in the organisation especially for the young field officers who adapt the same and are misguided by the false belief of the wrong historical practice.

Therefore, the Commission hereby directs the Petitioner to make sincere efforts in mobilizing its resources throughout the year for collection of Arrears under a structured receivable management programme besides taking corrective actions against the habitual defaulters. The Petitioner is hereby directed to submit an Action Plan within a month of issuance of this Order including the steps it proposes to take to collect electricity dues from the beginning of the financial year with same vigour as it normally does in the last quarter of the financial year.

6.2.2.4 Load Factor of KCC Consumers

The Commission in its Tariff Order dated 27.02.2019 had directed the Petitioner that KCC consumers having less load factor should be closely monitored and average consumption pattern and abnormality in consumption pattern should be checked and duly analysed. The Commission also directs the Petitioner to check KCC consumers who are repeatedly exceeding their sanctioned/contracted demand and take corrective action in such cases.

The Petitioner vide its submission dated 15.01.2020 under status of compliance of directives has submitted that it has awarded the work of analysis of monthly meter data of 8000 consumers to M/s Mobineers Info Systems Pvt. Ltd., New Delhi for one year covering the following attributes:

a. Tamper analysis by way of PT missing, CT short, CT open, CT interchange/ reversal, voltage imbalance, current imbalance, neutral disturbed, power failure, magnetic tamper, transactions, 35 KV spark Test, Cover open temper, high voltage/frequency surges.

b. Percentage slots for which demand is less than a given percentage when demand is available. (Default 5%)

c. Percentage black out slots when power is available.

d. Current month consumption vs. last month consumption or current month consumption vs. that of same month in last year is less than given percentage (Default 20%).

e. Contract demand violation.

f. Number of slots for which power factor is less than or more than or in between for a given value.

g. Consumption vis-à-vis usage index for the industry (process) wise, based on the data provided. Process wise load factor will be provided to vendor.

h. Ratio of Average/contracted demand, maximum/contracted demand, average/maximum demand, average demand shall be calculated for the number of months as specified time to time.

i. Double meter/Main meter/Independent feeder meter/Net Off meter/Bi-directional meter/ABT meter comparison difference of load survey data for every 30 minutes/15 minutes slot on per day & per month basis demand and consumption is more than given percentage (Default 3%) for entire months.

j. Consumption comparison of main meter with check meter/other end meter in terms of kWh, kVAh, MD on each & every month is to be complied/checked and if difference of main meter w.r.t. check meter/other end meter is more/less than the standardised value or as fixed by UPCL the check-out list is to be submitted.

k. Any other comparison, detail, analysis, report etc in desired format of UPCL from time to time for desired period and in desired timeline shall mandatorily be provided by the consultant.

l. Complete analysis of all the consumers alongwith reports, recommendations/comments in desired formats complete in all respect shall be submitted by consultant not later than 25th of every month.

The load factor of the KCC consumers, as submitted by the Petitioner in the prescribed Format-6 of Commercial Performance Monitoring Report has been shown in Table given below:

Table 6.16: Status of KCC Consumers

Description	As on 03/15	As on 03/16	As on 03/17	As on 03/18	As on 03/19	As on 12/19
Total KCC Consumers	19997	21119	22120	23206	23985	24802
*Abnormal cases	2709	3271	3232	3390	3961	15166
L.F<10%	8430	9063	9884	10335	10934	11225
L.F>10%	11567	12056	12236	12871	13051	13577

**Abnormal cases- Consumers exceeding sanctioned demand, Consumers having CT, PT by-pass Tamper Report, unbalanced Tamper Report & any other Tamper Report.*

From the above Table, it can be observed that as on 31.12.2019, number of consumers having load factor less than 10% were 11225, which is around 45.25% of the total number of KCC consumers. The Commission is of the view that the consumers having load factor less than 10% are in alarmingly high numbers. Moreover, 15166 consumers which is 61.14% of the total number of KCC consumers are falling under abnormal cases out of which majority comprises of consumers who have exceeded their sanctioned/contracted demand.

The Commission is of the view that the Petitioner has total consumer base of about 23.49 Lakh consumers in the State, out of which 24,802 consumers (Industrial category consumers having load 5 kW & above and Non-Domestic category consumers having load 10 kW & above) as on 31.12.2019, have been identified as Key Consumers (KCC). These key consumers which are only about 1% of the total consumer base of the Petitioner contribute nearly 70% of its total annual revenues.

Therefore, the Commission directs the Petitioner that KCC consumers having less load factor should be closely monitored and average consumption pattern and abnormality in consumption pattern should be checked and duly analysed. The Commission also directs the Petitioner to check KCC consumers who are repeatedly exceeding their sanctioned/contracted demand and take corrective action in such cases.

6.2.2.5 *Status of Revenue realisation per unit sold*

The Commission in its Tariff Order dated 27.02.2019 had directed the Petitioner to ensure that the data furnished in Commercial Performance Monitoring report should match with its Commercial Diary, i.e. CS-4 data and the Petitioner should ensure that in all future submissions of Commercial Performance Monitoring reports, the Average Realisation Rate should be calculated on the basis of recoveries on account of Realisation against energy dues only and the realisation shown should exclude recoveries from duties/cess, etc. Further, the realisation against energy dues should clearly bifurcate realisation against current dues & realisation against past dues, failing which appropriate action shall be initiated against the Petitioner/Licensee.

The Petitioner vide its submission dated 15.01.2020 under status of compliance of directives has submitted that formats of Commercial Diary have been revised so as to include the information as desired by the Commission and now the information is being provided to the Commission as per their direction.

However, it has been observed that despite Commission's specific direction that 'Average Realisation Rate should be calculated on the basis of recoveries on account of realisation against energy dues only and the realisation shown should exclude recoveries from duties/cess etc. and realisation against energy dues should clearly bifurcate realisation against current dues & realisation against past dues, the Petitioner has not clearly indicated in its Commercial Performance Monitoring Reports in Format 7, the revenue realisation including and excluding the realisation against past dues and is still showing realisation against arrears in its revenue realisation and calculating realisation per unit of energy sold by including realisation against arrears.

The status of Revenue Realisation per unit sold furnished by the Petitioner in the prescribed Format-7 is given below:

Table 6.17: Status of Revenue Realisation per unit sold

Year	Sold Energy (MU)	Total Revenue Realization (Rs. Lakh)*	Average Realization Rate (Rs./unit)	Average Power Purchase Cost per Unit sold (Rs./unit)	Approved /Trued-up Average Cost of Supply (Rs/Unit)
FY 2014-15	9685.16	418388	4.32	3.76	4.08
FY 2015-16	10298.14	524286	5.09	4.11	4.54
FY 2016-17	10575.544	555300	5.25	4.63	4.69
FY 2017-18	11208.82	603052	5.38	4.58	4.77
FY 2018-19	11826.68	637700	5.39	4.85	5.29

On examination, it has also been observed that in FY 2018-19, the total Revenue Realization, i.e. Rs. 6377.00 Crore submitted by the Petitioner in Format-7 of Commercial Performance Monitoring reports is actually inclusive of arrears of Rs. 159.89 Crore as shown in CS-4 Report of March, 2019.

The Commission again directs the Petitioner to ensure that the data furnished in Commercial Performance Monitoring report should match with its Commercial Diary, i.e. CS-4 data and the Petitioner should ensure that in all future submissions of Commercial Performance Monitoring reports the Average Realisation Rate should be calculated on the basis of recoveries on account of Realisation Against energy dues only and the realisation shown should exclude recoveries from duties/cess, etc. Further, the realisation against energy dues should clearly bifurcate realisation against current dues & realisation against past dues, failing which appropriate action shall be initiated against the Petitioner/Licensee.

6.2.3 *Bill Collection System*

Taking cognizance of various consumer complaints received by the Commission in writing and also during public hearing, the Commission earlier had directed the Petitioner to improve its existing Bill Collection System. Further, the Commission vide its Order dated 01.09.2005 had imposed a consolidated penalty of Rs. 1,00,000 and recurring additional penalty of Rs. 2,500 per day on UPCL for non-compliance of its directions with respect to bill collection system. However, not much has improved except for new Bill Collection Centres constructed under R-APDRP schemes.

The Commission in its Order dated 07.01.2016 in the matter of Petitioner's request on waiver and refund of penalty imposed by the Commission vide its Order dated 01.09.2005, had held as under:

> "*as a last attempt to induce Petitioner to work in right earnest for meeting the requirement of Order dated 01.09.2005, the recovery of penalty due after 31.03.2011 is kept in abeyance till final disposal of this Petition. A view on waiver or recovery would be taken after assessing performance of the Petitioner on following: (a) actions taken to augment and upgrade its prevailing Bill Collection System in order to make it consistent with the Commission's Order dated 01.09.2005 within six months from the date of issuance of this Order. Bimonthly report of action taken to be furnished to the Commission. (b) actions taken to extend the bill collection facility/services integrating all the Common Service (CSC) situated across the State within six months from the date of issuance of this*

Order and submit monthly progress report with number of CSCs integrated during the month latest by 15th day of next month (c) submit comprehensive Action Plan latest by 25.01.2016 including distinct focus/plan for Bill Collection System in rural and urban areas of the State in accordance with the orders/direction by the Commission in this regard for effective implementation of the direction issued at para (a) above.“

Thereafter, the Commission vide its Tariff Order dated 05.04.2016 had directed the Petitioner to comply with the directions issued in the Commission's Order dated 07.01.2016, failing which appropriate action under the Act/Rules/Regulations would be taken against the Petitioner for the continued non-compliance of the directions of the Commission. Further, the Commission had also directed the Petitioner to expedite integrating Common Service Centres (CSCs) available in the State with its billing system under the agreement executed between UPCL & Common Service Centre E-Governance Services India Ltd., New Delhi.

However, in the absence of compliance of the aforesaid directions, the Commission issued a show cause notice and, thereafter, the Commission in its Order dated 11.01.2017 had observed that the Petitioner's response to the issue was inadequate and that the Petitioner even after an elapse of more than 11 years had failed to implement the directions of the Commission issued in the matter of Bill Collection System. Further, the Commission in its aforesaid Order had also observed that even after a passage of almost a year since Commission's Order dated 07.01.2016, the total number of CSCs integrated with UPCL's system were only 909 which were not even 50% of the total 2000 number of CSCs situated across the State.

Accordingly, the Commission in its Order dated 11.01.2017 had directed the Petitioner to deposit the outstanding penalty amount from 01.04.2011 upto 30.11.2016 and continue paying daily penalty of Rs. 2500/- within 30 days of the close of each calendar month till such time each of the directions as given in the Order dated 09.07.2004 & 01.09.2005 of the Commission in the matter of Bill Collection System has been fully complied with.

In compliance to the same, the Petitioner vide its letter no. 1023 dated 01.03.2017 deposited an amount of Rs. 53,30,000/- against the penalty amount for the period from 01.04.2011 to 31.01.2017.

The Petitioner, in its earlier Tariff Petition, under status of compliance of directives had submitted that the amount of penalty paid by it upto 31.08.2017 is Rs. 1.11 Crore and on its request, the Commission vide letter no. 1039 dated 18.09.2017 withheld the penalty for next six months subject to completion of bill collection facilities and integration of all functional CSCs in the State by the said period. Further, the Petitioner had submitted that tender for developing facilities at Bill Collection Centers have been invited and the work is expected to get completed within 6 months from the date of the LOA.

Thereafter, actively monitoring the matter, the Commission through its various letters sought the progress of creation of new Bill Collection Centers and integration of CSCs situated across the State with UPCL's system. Meetings with regard to integration of CSCs with the Petitioner and Additional Secretary (IT), GoU were held in the Commission's office on 21.12.2017 and 02.01.2018, wherein several pertinent issues were raised and resolved. The Commission during the aforesaid meeting also directed the Petitioner to make widespread publicity/ Advertisement/workshop of the bill collection facilities & list of Villages Level Entrepreneurs (VLEs) under CSC operating in the vicinity of various electricity Sub-division/division officers of UPCL across the State.

Accordingly, the Commission in its Order dated 21.03.2018 had directed the Petitioner to complete the works of bill collection facilities and integration of all CSCs in the State latest by 30.04.2018, in absence of which, stern action under the provisions of the Act/Rules/Regulations would be initiated against it. Moreover, the Commission had also directed the Petitioner to make widespread publicity/ Advertisement/workshop of the bill collection facilities & list of VLEs operating in the vicinity of various electricity Sub-division/division officers of UPCL across the State.

Thereafter, a meeting was held in the Commission's office on 23.10.2018, wherein UPCL had assured to complete the work of pending Bill Collection Centers within 02 months.

UPCL vide its letter dated 17.01.2019 with respect to compliance of the directives had submitted the status of construction of Bill Collections as follows:

Table 6.18: Status of Bill Collection Center completed (as on 17.01.2019)

Zone	Garhwal	Haridwar	Kumaon	Rudrapur	Total
No. of Bill Collection Centers proposed	53	22	65	18	**158**
No. of Bill Collection Center completed	08	21	07	09	**45**

UPCL has submitted that a reward scheme for VLEs has been introduced in order to encourage the CSC VLEs. The number of active CSC counters, transaction count and transaction amount for December, 2018 were 1258, 24147 and Rs. 170.02 lakh respectively. Further, UPCL has submitted that continuous efforts are being made by them along with M/s CSC for conducting promotional activities and increasing number of transactions and amount collected from CSC transactions.

On examination of the above submission of UPCL, it was observed that although progress have been made w.r.t. promotion of Billing Transactions through CSC VLEs, however, the progress w.r.t. to Bill Collection is still abysmal.

Accordingly, the Commission in its Tariff Order dated 27.02.2019 had directed the Petitioner to complete the works of bill collection facilities and integration of all CSCs in the State latest by 30.04.2019, in absence of which, without prejudice to earlier penal actions stern action under the provisions of the Act/Rules/Regulations would be initiated against it. Further, the Commission directed the Petitioner to make widespread publicity/ Advertisement/workshop of the bill collection facilities & list of VLEs operating in the vicinity of various electricity Sub-division/division officers of UPCL across the State.

The Commission further vide its Order dated 10.04.2019 in the matter of '*suo-moto* proceedings initiated by the Commission in the matter of Show Cause Notice issued vide letter dated 18.04.2016 and in the matter of waiver and refund of penalty imposed by the Commission vide its Order dated 01.09.2005 for non-compliance of its directions with respect to Bill Collection System', the Commission held that the facilities/ modes available to the consumers w.r.t. bill payments have certainly improved in last 2-3 years with the continuous endeavor of the Petitioner and technological upgradation. Hence, the Commission decided to withdraw the daily penalty of Rs. 2500/- imposed on the Petitioner vide its earlier Order dated 01.09.2005, w.e.f. 01.08.2017. However, the penalty deposited by the Petitioner upto 31.07.2017 would neither be waived nor refunded to the Petitioner.

The Petitioner vide its submission dated 15.01.2020 under status of compliance of directives has submitted the status of construction of Bill Collection Centres as follows:

Table 6.19: Status of Bill Collection Center completed (as on 15.01.2020)

Zone	Garhwal	Haridwar	Kumaon	Rudrapur	Total
No. of Bill Collection Centers proposed	53	22	65	18	**158**
No. of Bill Collection Center completed	21	22	26	18	**87**

Further, with regard to compliance against the bill collection facilities, UPCL has submitted that:

i. A Petition was filed before the Commission for revision of transaction charges of the CSC Limited and reward scheme for VLEs. The Commission vide its Order dated 23.03.2018 approved the proposal as follows:
   (a) Transaction charges shall be increased from Rs. 4 to Rs. 8 per electricity bill collected by CSC.
   (b) Reward scheme for CSC VLEs as follows:

Table 6.20: Incentive for CSC VLE

Electricity Bill collection per VLE per month		Incentive
1.	Upto 100 Nos.	Nil (Only Transaction charges of Rs. 8)
2.	From 101 to 200 Nos.	Rs. 1 per bill (apart from transaction charges of Rs. 8)
3.	From 201 to 300 Nos.	Rs. 2 per bill (apart from transaction charges of Rs. 8)
4.	From 301 to 400 Nos.	Rs. 3 per bill (apart from transaction charges of Rs. 8)
5.	From 401 to 500 Nos.	Rs. 4 (apart from transaction charges of Rs. 8)
6.	Above 500 Nos.	Rs. 5 (apart from transaction charges of Rs. 8)

ii. To promote the payment of Electricity Bill to be paid through the CSC Counters, Bulk SMS are being sent to all consumers whose mobile nos. are registered in UPCL's consumer data base.

iii. To create awareness among consumers regarding the services provided by UPCL, limited quotations are being invited to print the flex and vinyl sheet boards to be fixed at all bill collection centers. UPCL is also getting printed pamphlets displaying the information regarding the electricity bill payment facility through the CSC free of cost to the consumers.

iv. At the level of M/s CSC, the promotional activities are also being conducted by the District Level Managers which include the awareness of the CSC vendors about the increase in CSC charges and introduction of new incentives/scheme for collection of the Electricity bills.

v. District Level Managers of M/s CSC are conducting workshops at the Block levels to promote the services being provided by CSC to the UPCL consumers for payment of electricity bill.

vi. UPCL and M/s CSC both are conducting the promotional activities and making the efforts to increase nos. of transactions. The Table of transaction below shows that the no. of transactions and amount collected are increasing.

Table 6.21: Quarterly status of CSC Transactions

Month	Active CSC Counters (Nos.)	Transaction Count (Nos.)	Transaction Amount (Rs. in lakh)
June, 18	605	10,592	66.41
September,18	1,167	18,617	143.92
December, 18	1,258	24,147	170.02
March,19	1325	32,806	234.16
June,19	1722	26,975	190.18
September,19	1811	34075	304.23
December,19	1958	35133	292.88

Since, at present more than 8000 CSCs have been established in the State and as per UPCL's submission only 1958 CSCs upto December 2019 are working as active counters, therefore, UPCL is required to make wide spread publicity of the scheme launched by it for the benefit of the CSC VLEs as well as consumers.

From the above submission of the Petitioner, it is observed that work of Bill Collection Centers is still pending in Garhwal and Kumaon Zones which shows the abysmal progress made by the Petitioner in creation of Bill Collection Centers as per the directions of the Commission. Therefore, **the Petitioner is directed to complete the works of bill collection facilities and integration of remaining CSCs in the State latest by 30.09.2020, in absence of which, without prejudice to earlier penal actions stern action under the provisions of the Act/Rules/Regulations would be initiated against it. Further, the Commission directs the Petitioner to make widespread publicity/Advertisement/workshop of the bill collection facilities & list of VLEs operating in the vicinity of various electricity Sub-division/division officers of UPCL across the State.**

6.3 Energy Audit

The Commission in its earlier Tariff Orders had been reiterating its direction for conducting the energy audit of 11 kV feeders and submit the audit report before the Commission. Moreover, the Commission in its Tariff Order dated 27.02.2019 had directed the Petitioner to provide/maintain the metering system at each feeder, 'T' points, DTs and consumers in its distribution network for effective energy auditing and accounting. The Petitioner was also directed to submit compliance report in this regard, failing which appropriate action may be taken against the Petitioner in accordance with the Act/Rules/Regulations.

The Commission is of the view that proper energy accounting can throw-up several actionable issues which, when addressed, shall result in marked reduction in distribution losses in the Petitioner's network.

The Petitioner in its submission dated 15.01.2020 w.r.t. status of compliance of directions of the Commission issued in the Tariff Order for FY 2019-20 has submitted that:

(i) Metering has been completed in all 33 kV substations upto 11 kV and are being maintained.

(ii) 11,602 DTs have been metered under IPDS/R-APDRP scheme and are being maintained.

With regard to metering of Distribution Transformers (DTs), it is observed that out of total number of DTs as on 31.12.2019 i.e. 75,150, only 11,602 DTs have been metered which is approx. 15.4%, this indicates that a large portion of DTs are still unmetered and requires immediate attention. Further, with regard to metering at 'T'points, it is observed that this remains to be a gray area as total number of 'T'points in the Sub-Transmission /Distribution network are yet to be identified. Therefore, identification of the same is to be taken-up on priority for the purpose of Energy Auditing.

The Commission has noted the progress made by the Petitioner w.r.t. metering. However, the Commission is of the view that keeping weak links, i.e. unmetered nodes in the distribution network would make the entire exercise of energy audit as futile as correct energy accounting and audit is not possible with incomplete metering in the 33 kV & 11 kV distribution network.

Therefore, the Petitioner is directed to provide/maintain the metering system at each feeder, 'T' points, DTs and consumers in its distribution network for effective energy auditing and accounting. The Petitioner is directed to submit compliance report in this regard by 30.09.2020, failing which appropriate action may be taken against the Petitioner in accordance with the Act/Rules/Regulations.

6.4 AT&C Losses

From the above comprehensive analysis of metering, billing & collection activities of the Petitioner, it is evident that still a lot of improvement, especially in the areas of provisional billing, replacement of Mechanical Meters, replacement of Defective Meters and Outstanding Arrears is required. The AT&C losses of the Petitioner as on 30.11.2019 as per Commercial Performance Monitoring report are 28.16%. The reason for such high AT&C loss is primarily high distribution losses and low collection efficiency till 30.09.2019. The Commission in its previous Orders had also categorically directed the Petitioner to ensure completion of the R-APDRP works within the specified time lines and also to achieve the specified target for reduction of AT&C losses to the extent of 15% in the selected towns within the stipulated timeframe for availing the benefits of conversion of loan into grant. In case, the Petitioner fails to do so, the servicing cost/cost of the loan in whole or part may not be allowed as pass through in the ARR. Similar directions were issued by the Commission in its Order dated 05.10.2016 pertaining to Capital Investment for the Integrated Power Development Scheme (IPDS) Project, Ministry of Power (MoP), Government of India (GoI).

Therefore, the Commission is of the view that with the above linkage of cost of funding with the AT&C loss achievement, such programs can be construed as a double edged sword, which might cause adverse financial impact in case the Petitioner fails to achieve the required reduction in AT&C losses of the target area.

The status of AT&C losses of UPCL for the last six financial years furnished by the Petitioner in the prescribed Format-8 is given below:

Table 6.22: Status of AT&C Losses

Year	Input Energy (MU)	Energy Sold (MU)	Assessment (Rs Lakh)	Collection (Rs Lakh)	Distribution Loss (%)	Approved Distribution Loss (%)	Collection Efficiency (%)	Actual AT&C Loss (%)	Computed AT&C losses (Based on Approved Norms) (%)
FY 2012-13	10789.11	8577.01	356995	346873	20.50	17.00	97.16	22.76	19.49
FY 2013-14	11216.31	9065.02	393412	387651	19.18	16.00	98.54	20.36	18.10
FY 2014-15	11888.23	9685.16	418940	418388	18.53	15.50	99.87	18.64	17.19
FY 2015-16	12559.60	10298.14	493267	524286	18.01	15.00	106.29	12.85	16.28
FY 2016-17	12780.32	10575.54	540075	555300	17.25	15.00	102.82	14.92	16.28
FY 2017-18	13213.73	11208.82	609821	603052	15.17	14.75	98.89	16.11	15.82
FY 2018-19	13803.71	11826.68	654424	637641	14.32	14.50	97.44	16.52	15.36
FY 2019-20 (upto Nov 2019)	9616.18	8228.09	479290	402428	14.43	14.50	83.96	28.16	15.36

It is evident from the above Table, that the Petitioner has made its efforts in reducing its distribution losses in FY 2019-20 (upto November, 2019) due to which it was able to bring its distribution losses below the approved distribution loss levels. However, the actual AT&C losses for the above period are higher than computed AT&C losses (calculated on the basis of approved level of distribution losses & collection efficiency in respective Tariff Orders) due to low collection efficiency.

From the above Table, it is observed that the collection efficiency in FY 2018-19 was 97.44%, in this regard, as discussed in above Section of Revenue realisation per unit sold, the Petitioner has included the realisation against arrears of Rs. 159.89 Crore in its total revenue realisation for calculating its AT&C losses.

Further, with regard to the performance during FY 2019-20 (upto 30.11.2019), the Commission has observed that despite Commission's specific directions for recovery of revenue throughout the year, the collection efficiency data is still depicting that the revenue collection drive is conducted rigorously during the fag end of the financial year only and sincere efforts at Petitioner's end are missing during the regular months of the financial year.

The Commission is of the view that the major component of AT&C losses are the distribution losses which basically comprises of Technical and Commercial losses. Further, the Commission is of the view that since Technical & Commercial losses are more in LT network in comparison to HT network, hence, it is apparent that in order to substantially reduce AT&C losses, the Petitioner needs to strengthen its LT network.

Earlier, during the field visits of the officers of the Commission in EDD- Pauri & EDD-Kotdwar, it had come to the notice that some of the villages in rural areas of the hill district are being supplied power through GI wire instead of ACSR conductors which are generally being used in the distribution network. In this regard, it was observed that such installations not only contributed in increasing the line losses but at the same time were hazardous for safety of the men and material. Moreover, the dilapidated condition of the GI wires in the rural networks and improper maintenance of protection system at 33/11 kV sub-station, leads to a situation of grave concern.

Accordingly, the Commission in its Tariff Order dated 27.02.2019 had directed the Petitioner to identify such feeders/spans where the power distribution network is on GI wire and replace them with the ACSR or better conductors latest by 30.09.2019 and submit a compliance report under affidavit on the same. Moreover, the Petitioner was also directed to prepare and submit an action plan for checking and refurbishment of protection systems at various 33/11 kV substations latest by 30.06.2019.

The Petitioner in its submission dated 15.01.2020 w.r.t. status of compliance of directions of the Commission issued in the Tariff Order for FY 2019-20 has submitted that it has directed all the field officers to comply with this direction of the Commission, i.e. to identify such feeders/spans where the power distribution network is on GI wire and replace them with the ACSR or better conductors. Besides this, in EDD, Pauri, EDD, Kotdwar, EDD, Ramnagar, EDD, Tehri, EDD, Vikasnagar, EDD, Sitarganj and EDD, Pithoragarh feeder/spans have already been identified and approval for execution of the work has been given to the field units.

In this regard, the Commission has observed that although Petitioner has submitted its compliance w.r.t. replacement of GI wire, however, specific information w.r.t. target date of completion of the aforesaid works has not been provided. Moreover, the Petitioner has not submitted any action plan for checking and refurbishment of protection system at various 33/11 kV sub-stations. The Commission is of the view that presence of a robust distribution network plays an important role in ensuring Availability, Accessibility and Quality of Power Supply to the consumers of the State.

Hence, the Petitioner is again directed to expedite the conversion of feeders/spans where the power distribution network is on GI wire with the ACSR or better conductors latest by 30.09.2020 and submit a compliance report under affidavit on the same. The Petitioner is also directed to prepare and submit an action plan for checking and refurbishment of protection systems at various 33/11 kV substations latest by 30.09.2020.

The Commission has observed that the percentage losses indicated in the Commercial Performance Monitoring Report are an average of losses occurring in HT/EHT and LT consumers. The Commissions is of the view that the marginal AT&C losses occurring at HT/EHT consumers end are compensating the losses occurring at LT consumers end, therefore, the actual losses occurring against LT consumers would be way above the AT&C losses shown in the status of AT&C losses given above.

In light of the above, it should be the foremost endeavour of the licensee to reduce the distribution losses at LT level within the acceptable limits. The Petitioner should take up the following works at the earliest for reducing the AT&C losses:

1. The Petitioner must replace all mechanical meters in a time-bound manner in all the divisions on a war footing. It is a known fact that the cost incurred in purchasing the electronic meter shall be recovered within no time as there shall be substantial increase in the revenue of the Petitioner.
2. The Petitioner must ensure that no ghost/fictitious/non-existent consumers exist in its billing database.
3. The Petitioner must conduct planned regular actions for early recovery of outstanding arrears.
4. The Petitioner must analyse KCC consumers having load factor less than 10% on a regular basis and lay down mechanism for checking inspection/tamper analysis/condition monitoring of MRI reports and metering equipment.
5. The Petitioner must ensure that all the meters of the consumers are read and their bills are prepared and distributed within time. The Petitioner shall also ensure that no provisional bills namely NA/NR are issued for more than two billing cycles in accordance with the provision of Electricity Supply Code Regulations, 2007 and amendments issued from time to time. Divisional head must be held accountable for not controlling provisional billings. The Petitioner should make efforts to always issue computerized bills to its consumers requiring no human intervention.
6. The Petitioner should prepare a time bound plan/programme to replace all the bare overhead conductors with insulated aerial bunched conductors (AB conductor) in theft prone areas alongwith effective monitoring mechanism for its implementation.
7. The Petitioner should also prepare a time bound plan/programme for segregation of rural feeders into Agriculture and Non-Agriculture load basis which would be an effective measure for segregation of theft/pilferage of electricity in Agriculture and Non-Agricultural usage in villages/rural areas.

8. The Petitioner should make extra efforts to get the arrears realised from the defaulting Government departments. The Commission is of the view that the Petitioner should promote and implement the pre-paid metering so that revenue recovery can be enhanced and problems related to accumulation of arrears is resolved.
9. Replace the GI wire based power distribution system with suitable conductor so that technical losses in the system can be reduced and the same would also help in improving the quality of power supply to the consumers.
10. The Petitioner should ensure that meters are installed at each point of energy accounting and are kept in proper working condition.

The Petitioner should also develop GIS based consumer indexing database in areas other than the areas covered under R-APDRP/IPDS, which shall be helpful in providing prompt services to consumer and shall be helpful in planning the new connections, transformer augmentation, phase change, localising fault, supply restoration and other services to consumers necessarily provided by any distribution utility having its vision & mission aligned to provide quality consumer services.

6.5 Commission's Analysis and Directions on Financial Performance

The Commission has been monitoring & reviewing the performance of the Petitioner based on the information/reports submitted by it. The Commission in its Tariff Order dated 29.03.2017, 21.03.2018 and 27.02.2019 carried out the analysis of financial performance of UPCL based on its statement of accounts in certain key areas. In line with the same methodology, the key performance ratios after taking into account the financial performance of UPCL in FY 2018-19 based on the audited financial statements are detailed below.

6.5.1 *Liquidity Ratio*

Liquidity ratio analyzes the ability of a company to pay off both its current liabilities as they become due as well as their long-term liabilities as they become current. In other words, these ratios show the cash levels of a company and the ability to turn other assets into cash to pay off liabilities and other current obligations.

Liquidity is not only a measure of how much cash a business has. It is also a measure of how easy it will be for the company to raise enough cash or convert assets into cash. Assets like accounts receivable, trading securities, and inventory are relatively easy for many companies to convert into cash in the short term. Thus, all of these assets go into the liquidity calculation of a company.

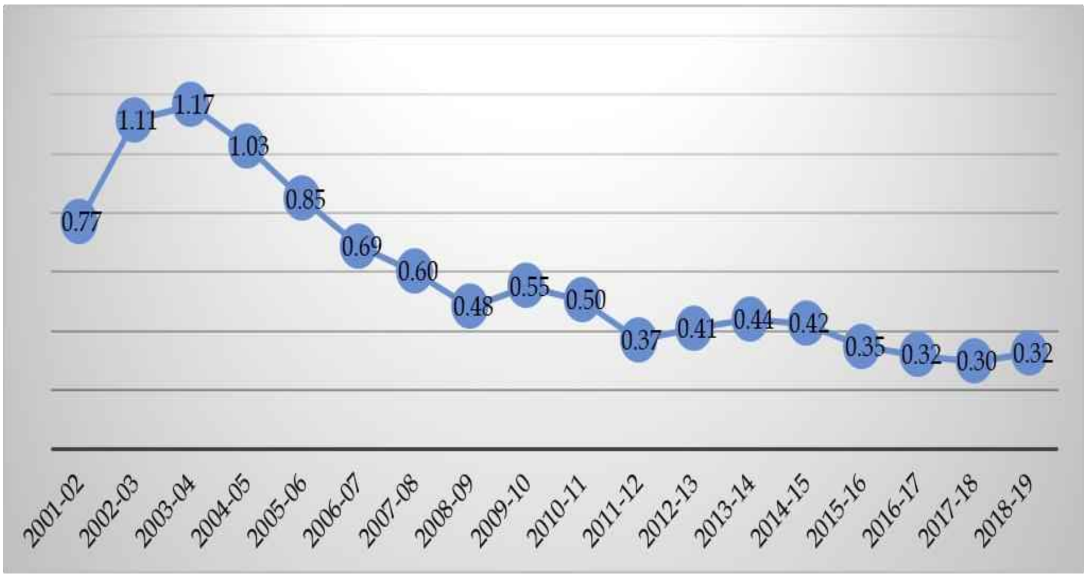
6.5.1.1 *Quick Ratio or Acid Test Ratio*

It is the ratio of (current asset – inventories) and current liabilities. The quick ratio or acid test ratio is a liquidity ratio that measures the ability of a company to pay its current liabilities when they become due with only quick assets. Quick assets are current assets that can be converted to cash within 90 days or in the short-term. Cash, cash equivalents, short-term investments or marketable securities and current accounts receivable are considered quick assets excluding inventories.

The quick ratio is often called the acid test ratio. The acid test shows how well a company can quickly convert its assets into cash in order to pay off its current liabilities. It also shows the level of quick assets to current liabilities.

Higher quick ratios are more favourable for companies because it shows that there are more quick assets than current liabilities. A company with a quick ratio of 1 indicates that quick assets equals current liabilities. This also shows that the company could pay off its current liabilities without selling any long-term assets.

Chart 7: UPCL Quick Ratio from FY 2001-02 to FY 2018-19



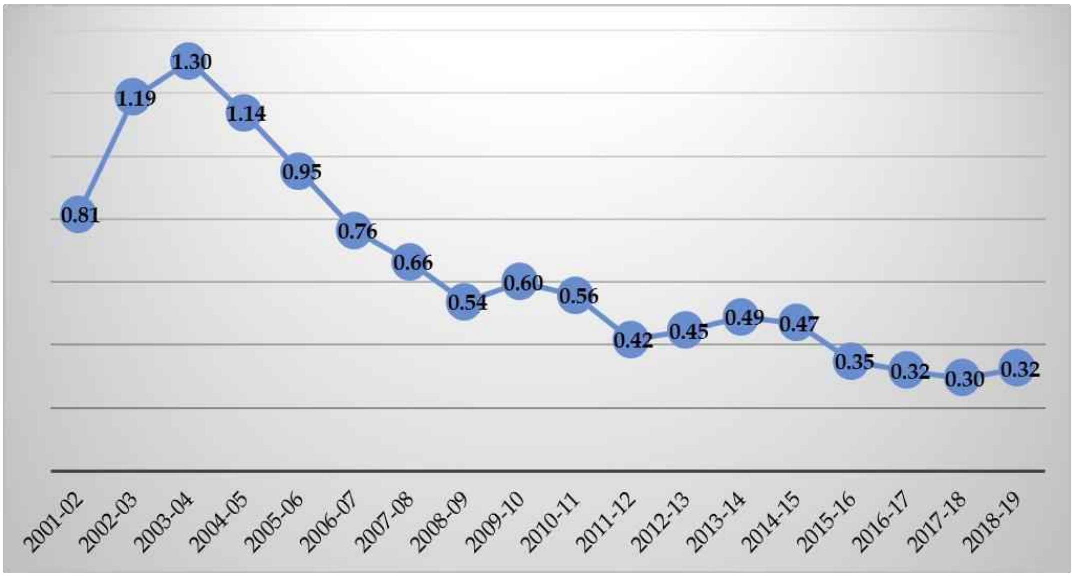
As can be seen from above graph, UPCL's Quick Ratio was almost 1 in the FY 2002-03 & FY 2003-04 and thereafter, has shows a downward linear trend in the ensuing years, thus, showing the Corporation's inability to maintain its liquidity over a period of time, the primary reasons for the same could be its inability to realise its dues from the consumers and in turn discharging the current liabilities which are also increasing. Further, based on the financial performance of UPCL in FY 2018-19, the situation has slightly improved and the ratio has increased from 0.30 in FY 2017-18 to 0.32 in FY 2018-19, which does not appear to be a considerable improvement as far as this ratio is concerned.

6.5.1.2 Current Ratio

It is the ratio of current assets and current liabilities. The current ratio is a liquidity and efficiency ratio that measures a firm's ability to pay off its short-term liabilities with its current assets. The current ratio is an important measure of liquidity because short-term liabilities are due within the next year, thus, implying that a company has a limited amount of time in order to raise the funds to pay for these liabilities. Current assets like cash, cash equivalents, marketable securities and inventories can easily be converted into cash in the short term. This means that companies with larger amounts of current assets will more easily be able to pay off current liabilities when they become due without having to sell off long-term, revenue generating assets.

A higher current ratio is always more favourable than a lower current ratio because it shows the company can more easily discharge the current liabilities. A Current Ratio of less than 1 indicates a high working capital leveraging and highly risky position since it indicates that the Current Liabilities are not fully backed up by the Current Assets and in the event of default, the Company may resort to selling its Assets to meet out its debts.

Chart 8: UPCL Current Ratio from FY 2001-02 to FY 2018-19



As can be seen from the above Graph, apart from initial few years upto FY 2004-05, UPCL is not able to maintain its current assets in proportion to its current liabilities, thus, showing a highly leveraged position on the part of the Corporation. The current ratio mainly indicates that how much times the short term liabilities are backed by the current assets, in case of UPCL as can be seen from the Graph, in the past five years UPCL is not able to maintain the said ratio to even as low as 0.5 which is way low than the industry standard of 1.

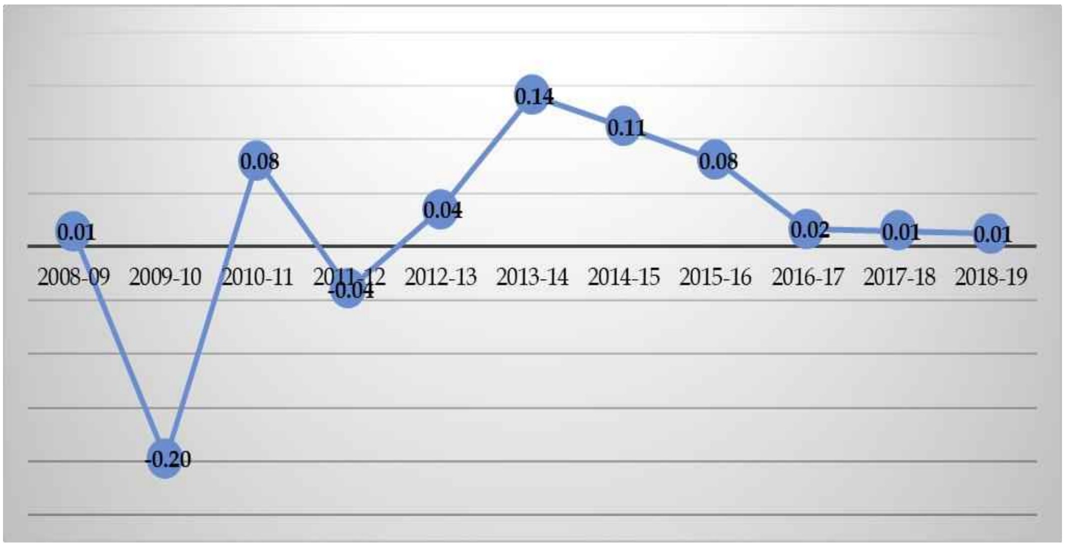
This indicates that for discharging its current liabilities, UPCL will either have to resort to liquidating its long term assets or borrow additional working capital loans. This also is an indicator that on one side UPCL has failed to recover its current and past dues from the consumers efficiently and on the flip side the current liabilities have been used to finance the long term assets of UPCL. The Commission has been pointing out towards this issue in its previous Tariff Orders that assets are being financed through current liabilities. UPCL has been claiming every year that internal resources are being used to finance certain asset additions. The internal resources in UPCL's case are nothing but funds which should have been used to discharge its current liabilities like Govt. Dues (Royalty, duties, PDF etc), instead have been utilised in creation of long term assets.

In this regard, **The Petitioner is directed to carry out the age-wise analysis of its current liabilities outstanding as on March 31, 2019 and based on the ageing analysis determine how much would be required to be discharged the excess provision that exists so that it may be reversed and submit the same to the Commission within 3 months from the date of Order.**

6.5.1.3 Operating Cash Flow Ratio

It is the ratio of cash flow from operation and the current liabilities. It is a measure of how well current liabilities are covered by the cash flow generated from a company's operations. The operating cash flow ratio can gauge a company's liquidity in the short term. Using cash flow as opposed to income is considered a cleaner, or more accurate measure to analyse the financial health of a company & also its operations. The operating cash flow ratio is a measure of the number of times a company can pay off current debts with cash generated in the same time period. A higher number means a company can cover its current debts more times, which is a good thing. Companies with a high or increasing operating cash flow ratio are in good financial health. Those that are struggling to cover liabilities may be in trouble, at least in the short term.

Chart 9: UPCL Operating Cash Flow Ratio from FY 2008-09 to FY 2018-19



As can be seen from the above Graph, cash flow from operating activities is hardly able to meet its current liabilities. UPCL is struggling to cover its current liabilities, at least in the short term. In FY 2009-10 and FY 2011-12, cash flow operating ratio is negative due to huge losses on account of high distribution losses and poor collection efficicency resulting into negative Cash flow from Operating Activities. Further, in FY 2018-19 this ratio has remained at 0.01 as was in FY 2017-18. In all the years the ratio is less than 1 which indicates that the company has generated less cash in the period than it needed to pay off its short-term liabilities. This may signal a need for more capital.

6.5.2 *Solvency Ratio*

Solvency ratios, also called leverage ratios, measures a company's ability to sustain operations indefinitely by comparing debt levels with equity, assets, and earnings. In other words, solvency ratios identify going concern issues and a firm's ability to pay its bills in the long term. Solvency ratios focusses more on the long-term sustainability of a company instead of the current liability payments. Better solvency ratios indicate a more creditworthy and financially sound company in the long-term.

6.5.2.1 Interest Coverage Ratio

It is a ratio of EBIT (operating Income) during a given period and the amount a company spends in interest payment on its debts during the same period. The interest coverage ratio is used to determine how easily a company can pay interest on outstanding debt. Essentially, the interest coverage ratio measures how many times over a company could pay its current interest payment with its available earnings. In other words, it measures the margin of safety a company has for paying interest during a given period, which a company needs in order to survive future (and perhaps unforeseeable) financial hardship should it arise. A company’s ability to meet its interest obligations is an aspect of a company’s solvency, and is, thus, a very important factor in the return for shareholders. The lower a company’s interest coverage ratio is, the more its debt expenses burden on the company. When a company's interest coverage ratio is 1.5 or lower, its ability to meet interest expenses may be questionable. 1.5 is generally considered to be a bare minimum acceptable ratio for a company and a tipping point below which lenders will likely refuse to lend the company more money, as the company’s risk for default is too high. Moreover, an interest coverage ratio below 1 indicates the company is not generating sufficient revenues to service its interest expenses. If a company’s ratio is below 1, it will likely need to spend some of its cash reserves in order to meet the difference or borrow more, which will be difficult for reasons stated above. Otherwise, even if earnings are low for a single month, the company risks falling into bankruptcy. Generally, an interest coverage ratio of 2.5 is often considered to be a warning sign, indicating that the company should be careful not to dip further.

Chart 10: UPCL Interest Coverage Ratio from FY 2001-02 to FY 2018-19

As can be seen from the Graph, UPCL has been suffering losses in most of the financial years and was hardly able to meet its interest liability. The standard ratio is 1.5 times and it can be seen from the above graph, that only in FY 2013-14, UPCL earned sufficient profit to maintain the ratio above the standard ratio.

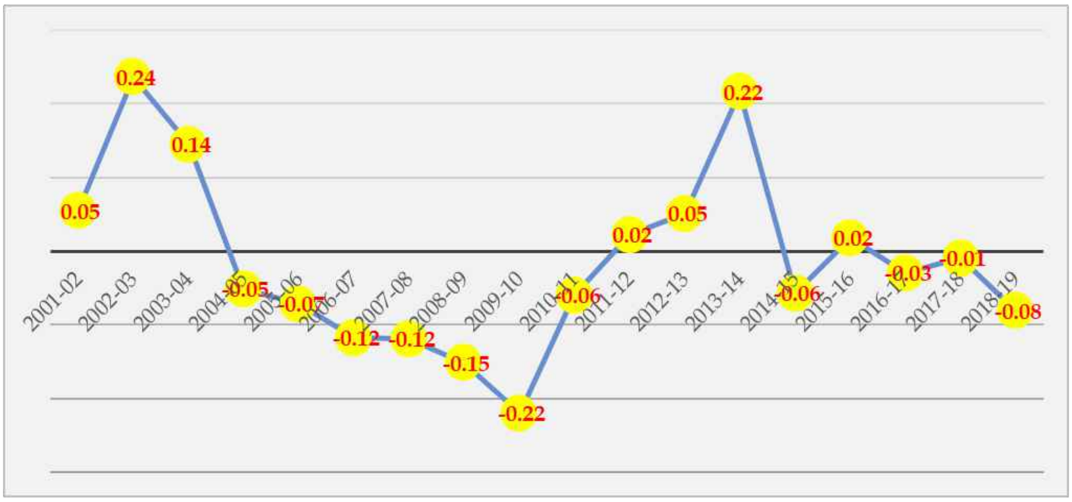
6.5.3 *Profitability Ratio*

Profitability ratios compares income statement accounts to show a company's ability to generate profits from its operations. Profitability ratios focus on a company's return on investment in inventory and other assets. These ratios basically show how well companies can achieve profits from their operations. Profitability is also important to the concept of solvency and going concern.

6.5.3.1 Return on Total Assets

It is a ratio of EBIT during a given period and average Fixed Assets. The ratio is considered to be an indicator of how effectively a company is using its assets to generate earnings before contractual/statutory obligations are paid. The greater a company's earnings in proportion to its assets (and the greater the coefficient from this calculation), the more effectively that company is said to be using its assets. This ratio allows to see the relationship between organisation's resources and its income, and it can provide a point of comparison to determine if an organization is using its assets more or less effectively than it had done previously.

Chart 11: UPCL Return on Assets Ratio from FY 2001-02 to FY 2018-19

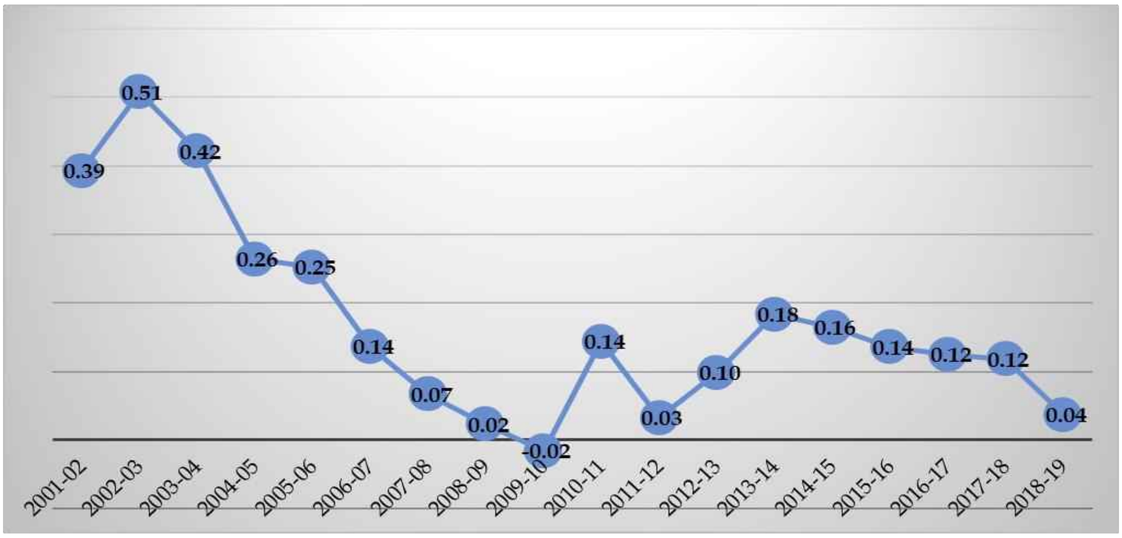


As can be seen from the Graph, UPCL earnings through its operations is not in parity with the investment made in building up its fixed assets over a period of time.

6.5.3.2 *Gross Margin Ratio*

Gross margin is the difference of average sales revenue and the average direct cost, ie. Power purchase cost in case of the Petitioner. Accordingly, gross margin ratio is the ratio of gross margin and the operating expenses of the company. Higher gross margin ratios are more favorable indicating that the company will have more money to pay its operating expenses.

Chart 12: UPCL Gross Margin Ratio from FY 2001-02 to FY 2018-19



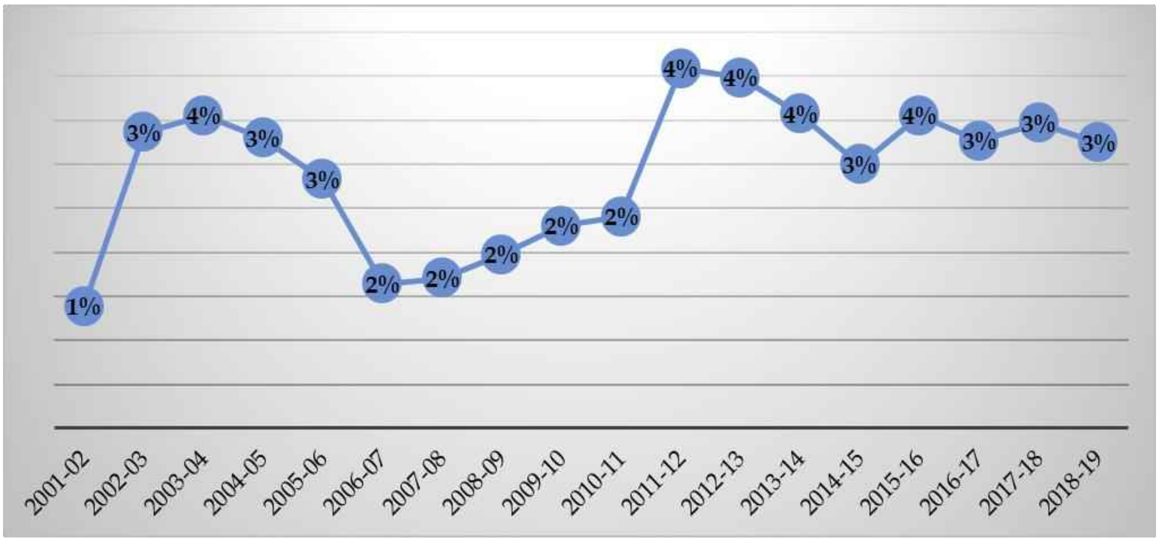
As can be seen from above Graph, UPCL is having a positive gross margin ratio except for FY 2009-10. This indicates that the company is able to sell power at a rate higher than the procurement cost of the same, however, the overall ratio is not on a higher side, with a maximum going upto 0.51 in FY 2002-03, indicating that the company would be left with meagre funds to meet its operational cost other than power procurement expense, and may land up in facing losses over a period of time.

6.5.4 *Operating or Activity Ratio*

6.5.4.1 Repair & Maintenance to Net Fixed Assets

The maintenance expense to fixed assets ratio allows to understand the age or condition of the company's equipment. An increase to a company's repairs and maintenance expense to fixed assets ratio over time can signal ageing equipment or assets that are being pushed to their operating limits.

Chart 13: UPCL R&M to Net Fixed Asset Ratio from FY 2001-02 to FY 2018-19



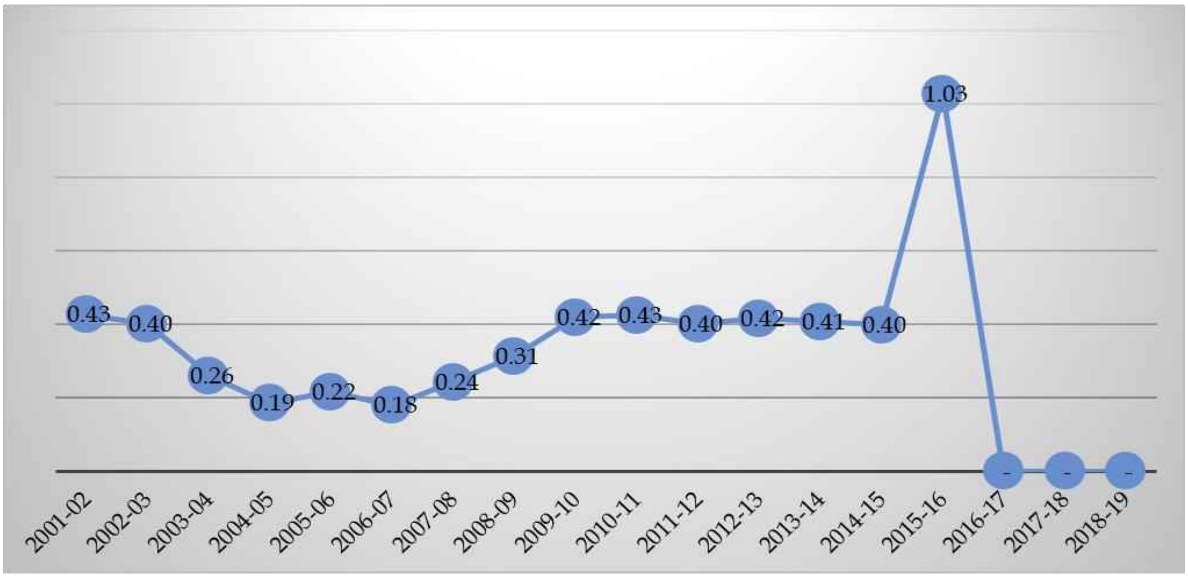
It can be seen from the Graph, that UPCL is incurring R&M expenses on an average of 3% of the Net Fixed Assets. UPCL appears to be performing fairly on this ratio aspect merely on account of the reason that it has been continuously receiving funds (grants) from GOI under various schemes of MOP, GOI namely APDRP, RAPDRP, IPDS etc. which besides covering development of new substaions/lines also include funding on augmentation/strengthening of old/existing assets, thus, reducing the requirements of Repair & Maintenance of old assets, as the same are either replaced by new assets or are augmented & strengthened.

6.5.4.2 Repair & Maintenance to Inventory Ratio

This ratio depicts the relation between the R&M expenses to Net Inventory maintained by the Corporation. In case of UPCL, being an Electricity Distribution Company, the inventory is not converted into sales as part of the operations carried out by the entity. Further most of the project works are getting done by the Corporation on turn-key basis, wherein the material and labour is supplied by the Contractor, thus, denying the need for maintenance of inventory for the said purpose. The maintenance of inventory would be required by the Corporation for the purposes of meeting its requirement of Repair & Maintenance works as may be carried out from time to time during the course of its operation. In view of the above, the calculation of inventory turnover ratio would not hold good for the discoms like UPCL wherein the inventory is being maintained not for the purposes of sale, but to meet out the expenses arising in the course of operation. Hence, a customized ratio has been worked upon to analyse the relation between the inventories maintained by the entity and how much of the same is being actually used during the year for meeting the R&M expenses while carrying out the operations of the entity.

The formulae for the same is as follows: R&M Expenses/Average Inventory.

Chart 14: UPCL R&M to Inventory Ratio Trend from FY 2001-02 to FY 2018-19



As can be seen from above Graph, UPCL is having an average inventory ratio between 0.30 to 0.40, which indicates that almost 40% of the average inventory maintained by the company is being consumed for meeting out the R&M expenses during the year which also suggests that inventory being maintained by UPCL is at a very high level. The capital inventory of Rs. 344.94 Crore as on 31.03.2019 is quite high, which is almost a third of the net additions to the GFA of Rs. 937.73 Crore during FY 2018-19 and R&M expenses of Rs. 137.66 Crore during the year. The Commission finds inventory levels maintained by UPCL as very high.

As can be seen from the above Graph, during FY 2015-16, FY 2016-17, FY 2017-18 & FY 2018-19 the aforesaid ratio has shown an absurd variation. This is because of the reason that in FY 2015-16, FY 2016-17, FY 2017-18 & FY 2018-19, UPCL has shown nil inventory under Current Assets in its audited financial statements, rather it had shown the entire amount under the Fixed Assets as inventory for Capital Works.

In this regard, UPCL has given disclosure in its audited financial statements for showing the entire inventory under Fixed Assets as reproduced below:

> *"Based on the consumption pattern of inventory comprising of stores and spares in the past, company is of the view that substantial portion of such inventory shall be consumed in future for construction/erection of the capital assets. Since the identification/determination of inventory to be consumed for other than capital purpose is not possible at this stage, the whole inventory of stores and spares has been classified as "Inventory for Capital Works.*
>
> *The company has not identified any obsolete, slow moving and dead stock except for those lying in the Centralised Stores Division as all the items in the store are useable in spite of the fact that they are very old."*

It appears that inventory levels have been so maintained so as to consume them in future for construction/erection of the capital assets. For future consumption maintaining such inventory level is a risky proposition as not only funds are blocked in purchasing the inventory but also the inventories carry holding costs. There is also a risk of loss/damages and obsolescence in technology if the inventories remain in stock for a long period of time as in power sector technologies are evolving with time.

Considering this as a prima-facie lapse on the part of the Petitioner with regard to inventory management, the Petitioner is directed to submit the following details within one month of the date of Order failing which appropriate action will be initiated under the Act:

a) **List of inventory as on 31.03.2019.**
b) **The accounting policies adopted in measuring inventories, including the cost formula used;**
c) **Basis on which inventories issued: FIFO/LIFO/etc. and reason for choosing the same.**
d) **Whether any inventory classification, such as ABC analysis has been done? If yes, the same may be submitted and if no, reason for the same may be furnished?**
e) **Whether the inventories are verified physically? If yes, the periodicity of the same, alongwith the report of last physical verification. If physical verification is not being conducted reasons for the same?**

6.5.5 *Efficiency Ratio*

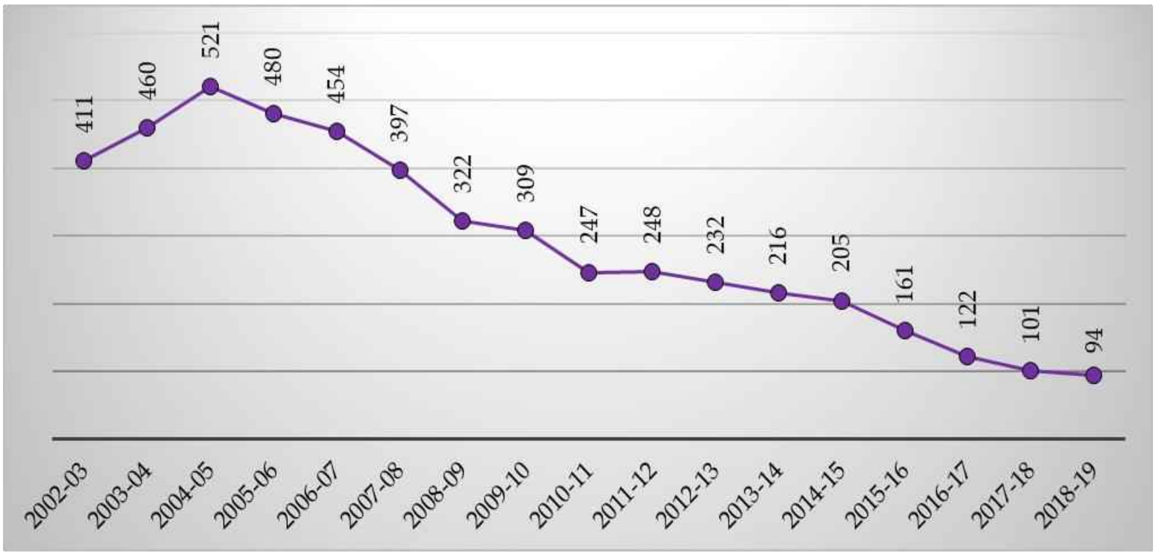
The efficiency ratio is typically used to analyze how well a company uses its assets and liabilities internally. An efficiency ratio can calculate the turnover of receivables, the repayment of liabilities, the quantity and usage of equity, and the general use of inventory and machinery.

6.5.5.1 Average Collection Period

Number of days of receivable represents collection period or age of receivables for distribution utilities. This measures effectiveness of a distribution utilities credit and collection efforts in allowing credit to customers, as well as its ability to collect cash from them. This comparison is used to evaluate how long customers are taking to pay a company. A low figure is considered best, since it means that a business is locking up less of its funds in accounts receivable, and so can use the funds for other purposes. Also, when receivables remain unpaid for a reduced period of time, there is less risk of payment default by customers. It is calculated based on the following formulae:

Average Collection Period: 365x(Average account receivables÷Revenue from sale of power).

Chart 15: UPCL Number of days of Receivable from FY 2002-03 to FY 2018-19



Although, the collection period of receivables of UPCL shows a trend of improvement, it has come down from 520 days in FY 2004-05 to 94 days in FY 2018-19, which is well within the national average of receivables in FY 2013 of 117 days. However, the collection period of 94 days reflects that UPCL takes almost 3 months to collect its dues. This is an area of concern and needs immediate and corrective action which is not a good sign for utility like UPCL, which is facing cash crunches to meet its obligations of power purchase and other operational expenses. There are other utilities in the country which have a collection period of less than 60 days. **The Petitioner is directed to submit within 3 months, an action plan to improve its collection period.**

6.5.5.2 Collection Efficiency Ratio

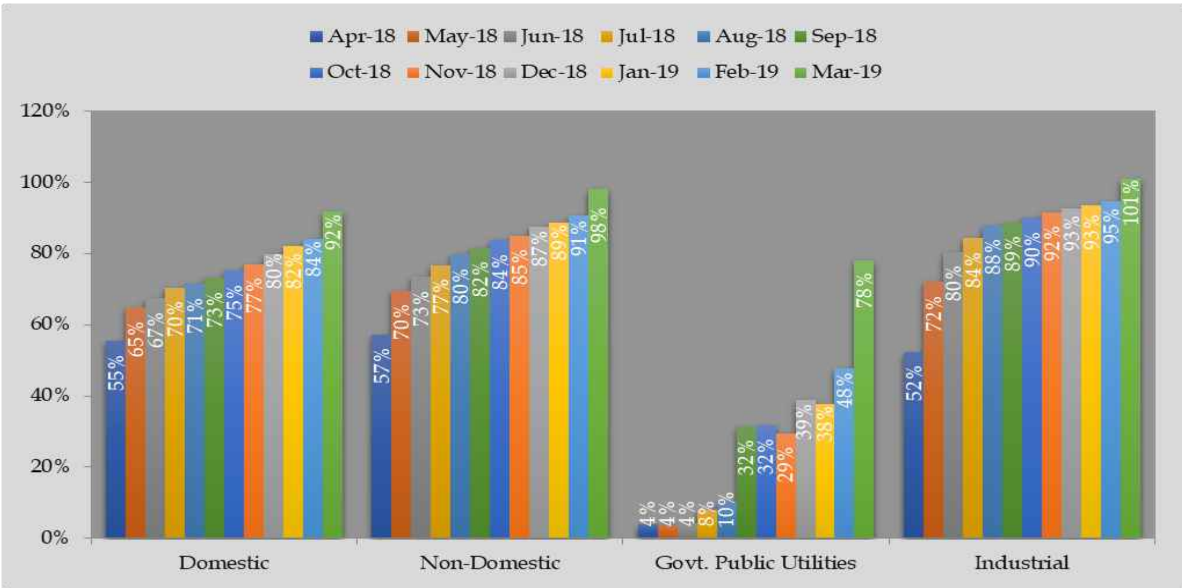
The Collection efficiency ratio represents the efficiency and effectiveness of the dues recovery processes of the entity on periodic basis. With respect to power distribution/retail sector, a higher ratio represents that there are well established procedure for recovery mechanism and the sales of the company are being channelled through metered connections. On the contrary, a lower ratio may represent a very lenient approach of the Corporation in recovering its dues from the consumers and lack of stringent processes to deal with the defaulting consumers.

The Commission in its MYT Order dated 05.04.2016, while approving the Business Plan of UPCL for second Control Period, has approved the collection efficiency for FY 2018-19 as 99%.

In the present case, the Commission has calculated the Collection Efficiency ratio of UPCL for FY 2018-19 under the four broad Tariff categories, viz. Domestic Consumers, Non-Domestic Consumers, Industrial Consumers and Govt. Utilities, based on the CS-4 report submitted by UPCL.

The Collection Efficiency ratio has been calculated based on the following formulae = **Realisation of (Current Assessment+Arrears)÷Current Assessment**

Chart 16: UPCL Collection Efficiency for FY 2018-19



As can be seen from the Graph, compared to overall Collection Efficiency approved by the Commission for FY 2018-19 of 99%, UPCL has been able to meet the same only in the month of March' 2019, ie. towards the end of the financial year. Further as can be seen from above, the rising graphs on monthly basis clearly indicates that during the initial months of the year the collection efficiency ranges between 50% to 60%, which is gradually increasing towards the latter part of the financial year. Moreover, as far as collection from Govt. Utilities is concerned, the same is too lower in the initial months and is ranging in the average of 30%-40% during the year and going upto a maximum of 78% in the month of March'19.

This trend clearly shows that the organization will be facing financial crunches during the initial months due to lack of adequate collection and may have to resort to outside borrowings to meet the cost of operations. This in turn will lead to imposition of additional financial burden on the organization in the form of interest cost and ultimately the effect of inefficiency would have to be borne by the consumers. If proper measures to ensure the timely collection of revenues from the consumers is taken right from the beginning and also timely action against the defaulters are taken then a discipline in collections could have been maintained and the required funds to meet the operational needs of the organization would be readily available in the form of revenue from sales at no extra cost.

It has been observed based on the Petition submitted by UPCL and also on the basis of audited financial statements of various years, UPCL has been resorting to over draft (OD) funding at high rate of interest to meet its operation cost which could surely be avoided if a proper discipline in collection of the assessed revenue is maintained on periodic basis. **In this regard, the Commission directs UPCL to submit a plan to demonstrate as to how it will work in the direction of improving its actual collection so that the gap between the actual collection efficiency and the collection efficiency approved by the Commission may be brought to minimum.**

6.5.6 *Conclusion*

After analyzing the data related to the Petitioner's Commercial Performance, it is concluded that the Petitioner has to take immediate action in eliminating Ghost consumers, Provisional billing cases (NA/NR/IDF), replacing mechanical meters which are adversely inflicting upon the Petitioner's commercial & financial viability.

The performance improvement can be done by judiciously allocating the responsibilities in field as well as at Corporate level. Moreover, the Petitioner should understand the significance of Commercial Performance Monitoring Reporting mechanism and should bring sincerity in its approach towards it. Further, a sense of belongingness/ownership has to be inculcated in every employee of the Petitioner's Organisation.

Further, it is imperative to highlight that the Commercial Performance Reporting mechanism not only brings transparency in the system but also is an eye-opener for the Petitioner for taking timely corrective actions. Therefore, authenticity of reports is of paramount importance. The Petitioner is required to strengthen its Commercial Wing so that timely authentic reports are furnished to the Commission and it shall also help in prompt dissemination of information within the organization which shall be beneficial for the Petitioner as well as for consumers of the State.

Considering the business spread of the Petitioner among its constituent divisions, the Commission is of the view that performance monitoring of the Petitioner should be done at its each

Distribution Division levels. For this purpose, it is imperative that Division-wise target setting on each parameter should be provided by the Petitioner in the first month of the Fiscal Year itself, so that the whole Technical & Commercial monitoring process becomes meaningful with conclusive inference on quantitative improvement on month on month basis.

Further, the Commercial Performance Monitoring Report in the prescribed formats shall be submitted to the Commission on regular basis by 25th day of the next months and such formats should be duly signed by Managing Director of UPCL.

7. Commission's Directives

The Commission in its previous Orders had issued a number of specific directions to the Petitioner with an objective of attaining operational efficiency, efficient manpower deployment and streamlining the flow of information. These objectives would be beneficial not only for the sector but also for the Petitioner's company, both in terms of short and long term perspective. These directions aims at creating a conducive, competitive and healthy environment for the Petitioner to provide good quality of electricity supply and service to the consumers of Uttarakhand at optimum and affordable costs. This Chapter deals with the compliance status and the Commission's views thereon on the directives issued vide MYT Order for FY 2019-20 to FY 2021-22 dated February 27, 2019 as well as the summary of new directions (given in preceding Chapters of this Order) for compliance and implementation by the Petitioner.

7.1 Compliance to the Directives Issued in MYT Order for FY 2019-20 to FY 2021-22 dated February 27, 2019

7.1.1 *Performance Report*

The Commission directed the Petitioner to submit the monthly as well as quarterly status report as per the directions of the Commission.

Petitioner's Submissions

The commercial performance monitoring report in the prescribed formats for the month of June 2019 has been submitted to the Commission vide letter no. 3201/UPCL/RM/UERC-10, dated October 04, 2019. Division wise quarterly targets for NA/NR/IDF/ADF/RDF/Mechanical Meters/Ghost consumers have been submitted to the Commission vide letter no. 2553/UPCL/RM/CPM, dated August 09, 2019.

The Commission has noted the submissions of the Petitioner. **The Commission again directs Petitioner to submit monthly Commercial Performance Monitoring reports strictly in the prescribed formats on regular basis, so as to reach the Commission latest by 25th day of the following month and furnish the Quarterly Targets as per prescribed Format - 2 & 3 alongwith the Commercial Performance Monitoring report for the month of April, 2020.**

7.1.2 *Sales*

The Commission directed the Petitioner to instruct its field offices to carry out the corresponding corrections in sales also in cases where billing is withdrawn. In future if such instance comes to the knowledge of the Commission, punitive action under Section 142 of the Electricity Act, 2003 may be taken against the errant officers of UPCL.

Petitioner's Submission

UPCL vide its letter no. 1313/UPCL/RM/C-14 dated April 04, 2018 directed all its concerned filed officers to carry out the corresponding corrections in sales (units) in cases where sales / billing is withdrawn. The instructions to this effect had also been circulated to the field officers vide O.M. dated July 01, 2017.

UPCL vide its letter no. 1330/UPCL/RM/C-15, dated April 29, 2018 again directed all the field officers to comply with the direction of the Commission and special care has been taken at the time of finalization of commercial diary for FY 2018-19. Before finalization of commercial diary for FY 2018-19, necessary corrections have been made in the same.

The Commission has noted the submissions of the Petitioner. The Commission as discussed in Chapter 3 of this Order while approving sales for FY 2018-19 observed similar anomalies wherein the ABR for some of the categories was less than the energy charge. As dealt in detail in Chapter 3 of this Order, the Petitioner in reply to Commission's query acknowledged that the issue with Commercial Diary still persists and that the field officers have been directed to rectify such anomaly in future. Further, the Petitioner also failed to submit the segregated assessed sales and rationale for such segregation of assessed sales being carried out by Corporate Office. The Commission has, therefore, carried out necessary adjustment in the revenue and sales in this regard. **The Commission directs the Petitioner to record all the sales on the assessement basis from FY 2019-20 in proper format with supporting documents which shall be scrutinised in future tariff filings and inability to furnish such data will attract appropriate action under the Act.**

7.1.3 *Load Shedding*

The Commission directed the Petitioner to obtain the prior approval of the Commission for load shedding to be carried out continuously for certain number of hours in a day for 15 or more days.

Petitioner's Submission

The Petitioner submitted that no load shedding has been carried out by UPCL in any area continuously for certain number of hours in a day for 15 or more days. Further, prior approval of the Commission shall be obtained as and when required as per the directions of the Commission. The Petitioner further stated that UPCL has also prepared a policy on power cuts. The policy was approved by the Board of UPCL in the meeting held on July 23, 2015 and the same was submitted to the Commission.

The Commission has taken note of the Petitioner's reply. **The Commission, hereby, once again directs the Petitioner to obtain the prior approval of the Commission for load shedding to be carried out continuously for certain number of hours in a day for 15 or more days.**

7.1.4 *AT&C Losses*

The Commission in its MYT Order dated February 27, 2019 directed the Petitioner to submit the division wise target distribution losses for FY 2018-19 and actual distribution losses for FY 2018-19 by June 30, 2019. Further, the Commission directed the Petitioner to submit the division wise actual collection efficiency achieved during FY 2018-19 by June 30, 2019.

Petitioner's Submissions

The Petitioner in its Petition submitted that the desired information has been submitted to the Commission vide letter no. 2720/UPCL/RM/C-15, dated August 22, 2019. The division wise targets of distribution losses and AT&C losses for FY 2018-19 were fixed vide UPCL's letter no. 1660/UPCL/RM/N-42, dated April 20, 2018 and 4412/UPCL/RM/N-42, dated December 14, 2018. The Petitioner also submitted the summary of these targets vis – a – vis actual as follows:

Table 7.1: Target and Actual Losses as submitted by the Petitioner for FY 2018-19

S. No.	Particulars	Target %	Actual %
1.	Distribution Loss	14.50%	14.32%
2.	AT&C Loss	15.36%	16.52%

The Commission directs the Petitioner to submit the division wise target distribution losses for FY 2019-20 and actual distribution losses for FY 2019-20 by September 30, 2020. Further, the Commission directs the Petitioner to submit the division wise actual collection efficiency achieved during FY 2019-20 by September 30, 2020.

7.1.5 *Power Purchase Quantum and Cost*

The Commission directed the Petitioner to seek prior approval of the Commission, in case the variation in power purchase quantum or power purchase cost in any quarter exceeded by more than 5% of the approved power purchase quantum and cost for the respective quarter worked out on pro-rata basis from the total approved quantity and cost for FY 2019-20, failing which, the Commission may disallow such additional power purchases so made while truing up the ARR for FY 2019-20.

The Commission directed the Petitioner that it should neither overdraw power at frequency below 49.90 Hz nor resort to load shedding due to improper procurement planning. Further, any drawal below 49.90 Hz shall not be allowed by the Commission.

Petitioner's Submissions

In compliance with the above directions, the Petitioner submitted that necessary approval shall be obtained from the Commission wherever the actual quantum and cost of power purchases during any quarter of FY 2019-20 will exceed by more than 5% of the quantum and cost of power purchases as approved by the Commission in its tariff order dated February 27, 2019 for FY 2019-20. **The Commission, directs the Petitioner to seek prior approval of the Commission, in case the variation in power purchase quantum or total power purchase cost in any quarter exceeds by more than 5% of the approved power purchase quantum and cost for the respective quarter worked out on pro-rata basis from the total approved quantum and cost for FY 2020-21.**

The Commission directs the Petitioner that it should neither overdraw power at frequency below 49.90 Hz nor resort to load shedding due to improper procurement planning. Further, any drawal below 49.90 Hz shall not be allowed by the Commission.

7.1.6 *Fixed Assets Register*

The Commission directed the Petitioner to submit the Fixed Asset Register updated upto FY 2017-18 within 3 months from the date of this Order.

Petitioner's Submissions

The Fixed Assets Registers for the period upto FY 2012-13 had already been submitted to the Commission. These registers were got prepared through a consulting firm i.e. M/s L.B. Jha & Co., Chartered Accountants, Kolkata.

The Fixed Assets Register for FY 2013-14 to FY 2015-16 was submitted to the Commission vide letter no. 1774/UPCL/RM/C-14 dated April 28, 2018. The Fixed Assets register for FY 2016-17 was submitted vide letter no. 1199/UPCL/RM/C-14 dated May 15, 2018.

The Pettioner further submitted that the work of preparation of fixed assets register for FY 2017-18 to FY 2019-20 was awarded to M/s. RSA & Co. Chartered Accountants, on March 13, 2018. The registers for FY 2017-18 have been submitted to the Commission vide letter no. 3720/UPCL/RM/C-15. dated November 25, 2019 and the work of preparation of fixed assets register for FY 2018-19 is in progress.

The Commission directs the Petitioner to submit the Fixed Asset Register updated upto FY 2019-20 within 3 months from the date of this Order.

7.1.7 *Bad &Doubtful Debts*

The Commission directed the Petitioner to submit the audit report of receivables identifying and classifying the same in detail within 6 months from the date of this Order. The Commission shall consider writing off of bad debts only upon submission of the same at the time of truing up.

Petitioner's Submissions

In compliance to the direction issued by the Commission, UPCL floated the tender for "Engagement of consultant for Audit of Receivables for Sale of Power" which was published in the newspapers on October 16, 2018. All the 41 distribution divisions were covered under the tender.

The tender was initially scheduled to be opened on November 6, 2018, however due to lack of sufficient participation the part – 1 of the tender was opened on November 30, 2018. Only two CA firms submitted their bid i.e. M/s R. K. Patel & Co. and M/s Singh Agarwal & Associates, Lucknow and the part – 1 of both the bidders was opened but only one firm i.e. M/s Singh Agarwal & Associates, Lucknow qualified and the firm was issued LoI vide UPCL's letter no. 259/ UPCL/ CE/CCP-II/22/2018-19(Singh), dated June 24, 2019.

M/s Singh Agarwal & Associates, Lucknow vide letter dated July 09, 2019 showed its inability to perform this project and accordingly UPCL vide its O.M. No. 401/UPCL/CE/CCP-II/22/2018-19, dated August 05, 2019 finally scrapped the above tender.

The Petitioner submitted that the matter was discussed in the meetings of the Audit Committee and the Audit Committee in the meeting held on June 19, 2019 inter-alia, directed as follows in the matter:

"Audit of Receivables of five divisions with largest receivables should be conducted by some Internal Auditors. This should be effectively monitored, and action taken be reported by Sep. 2019."

Tendering process was again initiated and UPCL vide letter no. 2867/UPCL/RM/N-20, dated February 06, 2019 awarded the work of Audit of Receivables in respect of the five distribution divisions having largest receivables as on March 31, 2019. The work was targeted to be completed within three months.

The Petitioner with regards to reconciliation of dues submitted that it has directed its field officers to provide the information. The Commission is however, yet to receive the said information. The Petitioner also submitted Bad Debt Policy for approval of the Commission.

The Commission has gone through the submissions of the Petitioner and observes that the Petitioner has not complied with the directions of the Commission with regards to the audit of the receivables and reconciliation of consumer-wise dues. The Commission has, therefore, at this stage not gone into the merits of the Bad Debt Policy submitted and **directs the Petitioner to submit all requisite information as directed in its Order dated February 27, 2019 withing six months from the date of this Order..**

7.1.8 *Reliability Indices*

The Commission once again directs the Petitioner to submit the monthly report on Reliability Indices on regular basis.

Petitioner's Submissions

Steps have been taken at Corporate Office to ensure that the said report is timely submitted to the Commission on regular basis. The report for the month of August, 2019 has been submitted to the Commission vide letter no. 3347/UPCL/RM/M-SSM, dated October 18, 2019. The details of SAIFI, SAIDI & MAIFI are as follows:

Table 7.2: Details of SAIFI, SAIDI & MAIFI for April 2018 to August 2019

Particulars	SAIFI (No.)		SAIDI (Minutes)		MAIFI (Minutes)	
	Rural	Urban	Rural	Urban	Rural	Urban
April, 2018	35	23	1120	643	9	7
May, 2018	49	29	1631	883	10	8
June, 2018	47	33	1326	904	11	11
July, 2018	49	35	1350	986	11	11
August, 2018	45	31	1303	917	11	11
September, 2018	43	30	1704	965	9	8
October, 2018	34	23	1182	762	6	7
November, 2018	27	16	825	462	6	6
December, 2018	28	19	848	486	6	6
January, 2019	33	24	1098	654	7	6
February, 2019	32	23	1157	658	7	6
March, 2019	28	20	890	506	7	5
April, 2019	34	25	1244	677	9	6
May, 2019	48	32	1906	950	11	7
June, 2019	49	37	1819	1116	11	9
July, 2019	63	41	1566	996	30	12
August, 2019	43	32	1471	809	11	9

The Commission has noted the Petitioner's reply on Reliability Indices. **The Commission once again directs the Petitioner to submit the monthly report on Reliability Indices on regular basis.**

7.1.9 *Voltage wise Cost of Supply*

The Commission once again directed the Petitioner to expedite the activities with regards to Voltage wise Cost of Supply and submit quarterly report on the status of same.

Petitioner's Submissions

The Petitioner submitted that the work of metering has been completed at all 33 kV and 11 kV T-points.

In compliance of direction issued by the Commission, UPCL has evolved a methodology for computation of voltage wise and category wise cost of service which has been submitted to the Commission vide letter no. 2719/UPCL/RM/C-15, dated August 22, 2019 seeking in - principle approval of the Commission.

As per direction of the Commission issued in the meeting held on August 27, 2019, UPCL vide its letter no. 3481/UPCL/RM/C-15, dated October 31, 2019 submitted the details of losses on 33 kV industrial feeders under EDD, Bhagwanpur.

The Commission has noted the Petitioner's reply. **The Commission directs UPCL to compute Voltage wise losses for each category of consumers and submit the data on voltage-wise losses alongwith next Tariff Petition.**

7.1.10 *Demand Side Management Measures*

The Commission directed the Petitioner to submit the report on various Demand Side Management measures at regular quarterly intervals to the Commission.

Petitioner's Submissions

The Petitioner submitted that upto March, 2017 a total of 38.845 Lakh LED bulbs have been distributed in the State. Out of which 2.02 Lakh 7W LED bulbs to BPL consumers and 1.98 Lakh 7W LED bulbs to other domestic consumers, having consumption upto 100 units have been distributed on subsidized rates. Further, distribution of 9W LED bulbs, 20W LED Tube Light and 50W Energy Efficient Ceiling Fans has also been initiated in the State with effect from April 10, 2017 onwards and submitted the status of the same.

The Commission has taken note of the submissions of the Petitioner. **The Commission, hereby, re-directs the Petitioner to submit a report on various Demand Side Management measures at regular quarterly intervals to the Commission.**

7.1.11 *Deficit/Surplus Power*

The Commission directed the Petitioner to bank the surplus energy available during the months of April 2019 to September 2019 and withdraw the same in the months of October 2019 to March 2020.

Petitioner's Submissions

The Petitioner has submitted that the banking plan for FY 2019-20 has been submitted to the Commission vide letter no. 2348/UPCL/Com/D&A/MD, dated July 22, 2019 and letter no. 3481/UPCL/RM/C-15, dated October 31, 2019. Apart from above firm banking, UPCL submitted that it is banking power on day ahead basis under "As and When" Mode and the same will be utilized during deficit month.

The Petitioner submitted that as on March 31, 2019, energy to the tune of 95.29 MU were balance to be receive from M/s APPCPL and as against the same 37.97 MU have been received in the month of April and May, 2019.

The Commission has taken note of the submissions of the Petitioner. **The Commission directs the Petitioner to bank the surplus energy available during the months of May 2020 to September 2020 and withdraw the same in the months of October 2020 to March 2021.**

7.1.12 *Status of NA/NR, IDF/ADF/RDF*

The Commission in its MYT Order dated February 27, 2019 directed the Petitioner to reduce the percentage NA/NR cases to below 2% in the entire State latest by September 30, 2019, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) & Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations would be initiated. The Commission directed Company Secretary of UPCL to issue a copy of these directions to concerned officers, as mentioned hereinabove, for information and necessary compliance.

Petitioner's Submissions

UPCL vide its letter no. 1330/UPCL/RM/C-15, dated April 29, 2018 had directed all the field officers to comply with this direction of the Commission i.e. to restrict percentage of IDF meters to 3%. Later on, division wise quarterly targets of NA/NR cases were fixed to reduce the NA and NR Cases from 3.72% and 4.62% at the end of Q1 to 1.07% and 0.87% respectively by the end of Q4 and submitted to the Commission vide letter no. 2553/UPCL/RM/CPM, dated August 09, 2019. However, the actual status of NA and NR cases have been 3.54% and 4.64%, 4.25% and 4.16% & 2.46% and 4.83% as on March 31, 2018, March 31, 2019 and December 31, 2019 respectively.

The Commission again directs the Petitioner to put in its sincere efforts in reducing the percentage NA/NR cases to below 2% in the entire State latest by 30.09.2020, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) & Executive Engineer (Test) shall be held responsible for non-

compliance of the Commission's directions and appropriate action under the Act/Rules/ Regulations would be initiated.

The Commission again directs the Petitioner to restrict the provisional billing cases within the limit prescribed above as well as in Regulations, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) and Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated.

7.1.13 *Replacement of Improper, Non-Functional, Stop/Stuck up defective or IDF Meters*

The Commission directed the Petitioner to restrict the percentage defective meters (IDF) to 3% in plain as well as in hilly areas of the State upto June 30, 2019, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) & Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations would be initiated. The Commission directed Company Secretary of UPCL to issue a copy of these directions to concerned officers, as mentioned hereinabove, for information and necessary compliance.

Petitioner's Submissions

UPCL vide letter no. 1330/UPCL/RM/C-15, dated April 29, 2018, had directed all the field officers to comply with this direction of the Commission i.e. to restrict percentage of IDF meters to 3%. Later on, division wise quarterly targets of IDF meters were fixed to be reduced to 2.07% by the end of Q4 vide letter no. 2553/UPCL/RM/CPM, dated August 09, 2019. However, the status of defective meters as on December 31, 2019 is at 4.21%.

The Commission again directs the Petitioner to restrict percentage defective meters (IDF) to 3% in plain as well as in hilly areas of the State by June 30, 2020, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) and Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated.

7.1.14 *Replacement of Mechanical Meters*

The Commission directed the Petitioner to ensure complete replacement of Mechanical Meters by Electronic Meters well before June 30, 2019, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/ Regulations would be initiated. The Commission directed Company Secretary of UPCL to issue a copy of these directions to concerned officers, as mentioned hereinabove, for information and necessary compliance.

Petitioner's Submissions

UPCL vide its letter no. 1330/UPCL/RM/C-15, dated 29-04-2018 directed all the field officers to comply with this direction of the Commission i.e. to ensure complete replacement of mechanical meters by electronic meters before June 30, 2019. Later on, division wise quarterly targets for replacement of mechanical meters were fixed to be reduced to "zero" by the end of Q4. However, the actual status as on December 31, 2019 is 19,450 mechanical meters to be replaced to electronic meters.

The Commission directs the Petitioner to ensure complete replacement of Mechanical Meters by Electronic Meters well before September 30, 2020, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/ Regulations would be initiated. The Commission directs Company Secretary of UPCL to issue a copy of these directions to concerned officers, as mentioned hereinabove, for information and necessary compliance.

7.1.15 *NB & SB Cases*

The Commission directed the Petitioner to liquidate and finalise atleast 5% of the NB/SB cases in each quarter and submit quarterly report before the Commission. In absence of the same, action under the provisions of Act/Rules/Regulations may be initiated against the Petitioner.

Petitioner's Submissions

UPCL vide its letter no. 1330/UPCL/RM/C-15 dated April 29, 2018 directed all the field officers to liquidate and finalise atleast 5% of NB/SB cases in each quarter. NB/SB cases as on March 31, 2018 were 1,60,409 and the same as on December 31, 2019 were 1,61,393.

The Commission again directs the Petitioner to liquidate and finalise atleast 5% of the NB/SB cases in each quarter and submit quarterly report before the Commission. In absence of the same, action under the provisions of Act/Rules/Regulations may be initiated against the Petitioner.

7.1.16 *Outstanding Arrears*

The Commission directed the Petitioner to make sincere efforts in mobilizing its resources throughout the year for collection of Arrears under a structured receivable management programme besides taking corrective actions against the habitual defaulters.

Petitioner's Submissions

The Petitioner submitted that in view of additional energy charge approved by the the Commission vide its order dated October 25, 2019 for the period from October 01, 2019 to March 31, 2020, UPCL vide its letter no. 3513/UPCL/RM/L-17, dated November 05, 2019, fixed/revised the division wise targets of billing efficiency at 87.61%, collection efficiency at 100%, AT&C Losses at 12.39% and revenue collection of Rs. 5.20/unit for FY 2019-20.

The Petitioner also submitted that vide its letter no. 4542/MD/UPCL/I-7, dated May 01, 2019, also fixed the monthly targets of the officers at various levels for checking of consumers, study of consumers as vigilance checks. For recovery of outstanding arrears, the connections of defaulting consumers are being disconnected and notices under Section 3 & 5 of the Uttarakhand (U.P. Government Electricity undertakings (Dues Recovery) Act, 1958) Adaptation and Modification order, 2002 are being issued regularly and the same shall be taken-up more promptly for ensuing early recovery of outstanding arrears.

Therefore, the Commission hereby directs the Petitioner to make sincere efforts in mobilizing its resources throughout the year for collection of Arrears under a structured receivable management programme besides taking corrective actions against the habitual

defaulters. The Petitioner is hereby directed to submit an Action Plan within a month of issuance of this Order including the steps it proposes to take to collect electricity dues from the begining of the financial year with same vigour as it normally does in the last quarter of the financial year.

7.1.17 *Status of KCC Consumers*

The Commission directed the Petitioner that the KCC consumers having less load factor should be closely monitored and average consumption pattern and abnormality in consumption pattern should be checked and duly analysed. The Commission also directed the Petitioner to check KCC consumers who are repeatedly exceeding their sanctioned/contracted demand and take corrective action in such cases.

Petitioner's Submissions

The Petitioner submitted that the monitoring is being done on regular basis.

The Commission directs the Petitioner that KCC consumers having less load factor should be closely monitored and average consumption pattern and abnormality in consumption pattern should be checked and duly analysed. The Commission also directs the Petitioner to check KCC consumers who are repeatedly exceeding their sanctioned/contracted demand and take corrective action in such cases.

7.1.18 *Status of Revenue realisation per unit sold*

The Commission directed the Petitioner to ensure that the data furnished in Commercial Performance Monitoring report should match with its Commercial Diary, i.e. CS-4 data and the Petitioner should ensure that in all future submissions of Commercial Performance Monitoring reports the Average Realisation Rate should be calculated on the basis of recoveries on account of Realisation Against energy dues only and the realisation shown should exclude recoveries from duties/cess, etc. Further, the realisation against energy dues should clearly bifurcate realisation against current dues & realisation against past dues, failing which appropriate action shall be initiated against the Petitioner/Licensee.

Petitioner's Submissions

The Petitioner submitted that the Formats of Commercial Diary have been revised so as to include the information as desired by the Commission. Now the information is being provided to the Commission as per their direction.

The Commission again directs the Petitioner to ensure that the data furnished in Commercial Performance Monitoring report should match with its Commercial Diary, i.e. CS-4 data and the Petitioner should ensure that in all future submissions of Commercial Performance Monitoring reports the Average Realisation Rate should be calculated on the basis of recoveries on account of Realisation Against energy dues only and the realisation shown should exclude recoveries from duties/cess, etc. Further, the realisation against energy dues should clearly bifurcate realisation against current dues & realisation against past dues, failing which appropriate action shall be initiated against the Petitioner/Licensee.

7.1.19 *Billing and Collection System*

The Commission directed the Petitioner to complete the works of bill collection facilities and integration of all CSCs in the State latest by April 30, 2018, in absence of which, stern action under the provisions of the Act/Rules/Regulations would be initiated against it. Moreover, the Commission directs the Petitioner to make widespread publicity/ Advertisement/workshop of the bill collection facilities & list of VLEs operating in the vicinity of various electricity Sub-division/division officers of UPCL across the State.

Petitioner's Submissions

The Petitioner submitted the status of construction of bill collection centre as follows:

Package–A (Garhwal Zone): Under this package, Collection centre facilities were to be provided in 52 Centres of 04 Electricity Distribution Circles. At 20 centres the work is completed and in remaining 23 centres more than 50%work is complete. In 09 centres less than 50% work is complete whereas in remaining centres the work is in progress and completion of 06 centres is expected to be completed by December 31, 2019 and 03 centres by January 15, 2020.

Package–B (Haridwar Zone): Under this package, Collection centre facilities were to be provided in 22 Centres of 02 Electricity Distribution Circles and all the 22 centres work is completed.

Package–C (Kumaun Zone): Under this package, Collection centre facilities were to be provided in 65 Centres of 03 Electricity Distribution Circles. At 26 centres the work is completed and in remaining 11 centres the work is in progress and completion of these remaining centres is expected by December 31, 2019. While in remaining 28 centres, contractor has not been turned-up. In this connection, UPCL vide its letter no. 875/C(C&P-I)/27/2017-2018 (Package-C)/National, dated July 27, 2019, issued notice to the contractor – M/s National Construction, Rudrapur to show cause for non-completion of work in time. In turn, the contractor vide its letter no. 0/02/NC, dated July 28, 2019, submitted its reply in the matter. Presently, the matter is under examination in view of the factual position and reply submitted by the contractor. The final decision in the matter shall be taken in due course.

Package-D (Rudrapur Zone): Under this package, Collection centre facilities were to be provided in 18 Centres of 02 Electricity Distribution Circles. The work has been completed at all the 18 centres.

UPCL is taking all measures to promote the payment of electricity bills by the consumers to be paid through the CSC counters by sending the bulk SMS to all the consumers whose mobile nos. are registered with UPCL consumer data base. UPCL is inviting limited quotation tender to print the flex and vinyl sheet boards to fix at all bill collection centres in order to create awareness among consumers regarding the services provided by UPCL. UPCL is also getting the printed pamphlets displaying the information regarding the electricity bill payment facility through CSC without any additional charges. At the level of M/s CSC, the promotional activities are being conducted by the district level managers which include the awareness of the CSC vendors about the increase in CSC charges and introduction of new incentives/scheme for collection of electricity bill payments. District level managers of M/s CSC are conducting workshops at the block levels to promote the services being provided by CSC to UPCL consumers for payment of electricity bills. UPCL and M/s CSC both are conducting the promotional activities and making efforts to increase the no. of transactions. The Active CSC counters, No. of Transactions and Transactions as on September 2019 is 1811, 34075 and Rs. 3.04 Crore respectively against 605, 10592 and Rs. 0.66 Crore as on June 2018.

The Petitioner is directed to complete the works of bill collection facilities and integration of remaining CSCs in the State latest by September 30, 2020, in absence of which, without prejudice to earlier penal actions, stern action under the provisions of the Act/Rules/Regulations would be initiated against it. Further, the Commission directs the Petitioner to make widespread publicity/Advertisement/workshop of the bill collection facilities & list of VLEs operating in the vicinity of various electricity Sub-division/division officers of UPCL across the State.

7.1.20 *Departmental Employees*

The Commission directed the Petitioner to submit the bills of all the departmental employees for FY 2017-18 within 2 months of the date of the Order before the Commission. The Commission also directed the Petitioner to reconcile the figures of departmental employees in the commercial data as well as that claimed for calculation of employee expenses and submit the same to the Commission within 2 months of the date of the Order. As regards the concession provided to these consumers, the Petitioner was directed to show the same separately as expenses in its accounts.

Petitioner's Submissions

The billing ledgers of the departmental employees for the period January 2018 to June 2019 were submitted to the Commission vide letter no. 3481/UPCL/RM/C-15, dated October 31, 2019. The Petitioner submitted that 7040 consumers, 136242 bill months, 39.13 MU and Rs. 15.10 Crore have been billed. The Petitioner submitted that it is facing difficulty in reconciliation of the figures of departmental employees as shown in Commercial Diary as well as the information maintained in HR Section. However, it is in process to evolve the mechanism for such reconciliation which will be completed in due course of time. The Petititioner also submitted that instructions have been issued to the concerned officers to bill all the departmental employees and pensioners of UPCL, UJVNL and PTCUL on the basis of rates approved for domestic category from April 01, 2018. They have also been directed to book the concession provided to them in the books of accounts in a separate head of accounts.

The Commission directs the Petitioner to reconcile the figures of departmental employees in the commercial data as well as that claimed for calculation of employee expenses and submit

the same to the Commission within 2 months of the date of the Order. As regards the concession provided to these consumers, the Petitioner is directed to show the same separately as expenses in its accounts.

UPCL is once again directed to ensure compliance of the directions of Commission given in the Tariff Order dated March 21, 2018 in this regard failing which action may be taken against it for non-compliance of the orders of the Commission.

7.1.21 *Location of Installation of Meters*

The Commission directed the Petitioner to submit quarterly status report with regards to shifting of meters for all divisions to the Commission.

Petitioner's Submissions

UPCL vide its letter no. 1330/UPCL/RM/C-15, dated April 28, 2018 directed all the field officers to ensure compliance to the Commission's direction.

The Commission directs the Petitioner to submit quarterly status report with regards to shifting of meters for all divisions to the Commission.

7.1.22 *Bad Debt*

The Commission directed the Petitioner to account its billing adjustment and writing off the bad debts properly in accordance with the accounting policies.

Petitioner's Submissions

The Petitioner submitted that any amount of billing which has to be withdrawn by UPCL at the direction of Courts/Forums or if found incorrect, is adjusted from the provision for bad and doubtful debts as per the accounting practices in other Distribution companies.

The Commission again directs the Petitioner to account its billing adjustment and writing off the bad debts properly in accordance with the accounting policies. UPCL is also directed to submit the consumer wise details of bad debts written off within one month from the end of each quarter.

7.1.23 *Impact of VII Pay Commission*

The Commission directed the Petitioner to submit the details of VII Pay Commission arrears paid to its employees in FY 2018-19 in the true up of FY 2018-19.

Petitioner's Submissions

The Petitioner submitted that complete information in respect of employee expenses has been provided in the Tariff Petition for FY 2020-21 in the chapter of true-up of expenses and revenue for FY 2018-19.

The Petitioner is directed to maintain separate details of the amount paid as arrears to its employees on account of implementation of the recommendations of VII Pay Commission.

7.1.24 *Conductor Augmentation*

The Petitioner was directed to indentify such feeders/spans where the power distribution network is on GI wire and replace them with the ACSR or better conductors latest by September 20, 2019 and submit a compliance report under affidavit on the same. The Petitioner was also directed to prepare and submit an action plan for checking and refurbishment of protection systems at various 33/11 kV substations latest by June 30, 2019.

Petitioner's Submissions

The Petitioner submitted that its filed officers have been directed to identify such feeders/spans where the power distribution network is on GI wire and to replace the same with ACSR conductor. Most of the places have already being identified and approval for execution of work has been given to the field units.

The Petitioner is again directed to indentify such feeders/spans where the power distribution network is on GI wire and replace them with the ACSR or better conductors latest by September 30, 2020 and submit a compliance report under affidavit on the same. The Petitioner is also directed to prepare and submit an action plan for checking and refurbishment of protection systems at various 33/11 kV substations latest by June 30, 2020.

7.1.25 *Scrutiny of KCC Data*

The Commission directed UPCL to constitute a cell in its commercial wing for analysis and monitoring of KCC data including low load factor cases, meter tamper cases etc. The Commission directed UPCL to submit the report on analysis and monitoring of KCC data on monthly basis by 15th of every month.

Petitioner's Submissions

UPCL vide its letter no. 1674/UPCL/CE/CCP-II/14/2018-19 (Mobineers)/Part-(b), dated March 01, 2019 awarded the work for one-year monthly meter data analysis through various reports of 8000 consumers to M/s Mobineers Info Systems Pvt. Ltd., New Delhi. The data analysis shall cover the following attributes:

- Tamper analysis by way of PT missing, CT short, CT open, CT interchange /reversal, voltage imbalance, current imbalance, neutral disturbed, power failure, magnetic tamper, transactions, 35 KV spark Test, Cover open temper, high voltage/ frequency surges.
- Percentage slots for which demand is less than a given percentage when demand is available. (Default 5%)
- Percentage black out slots when power is available.
- Current month consumption Vs last month consumption or current month consumption Vs that of same month last year is less than given percentage (Default 20%).
- Contract demand violation.
- Number of slots for which power factor is less than or more than or in between for a given value.
- Consumption vis-a-vis usage index for the industry (process) wise, based on the data provided. Process wise load factor will be provided to vendor.
- Ratio of Average/ contracted demand, maximum/ contracted demand, average/ maximum demand, average demand shall be calculated for the number of months as specified time to time.

- Double meter /Main meter/ Independent feeder meter/ Net Off meter/ Bi-directional meter/ ABT meter comparison difference of load survey data for every 30 minutes / 15 minutes slot on per day & per month basis demand and consumption is more than given percentage (Default 3%) for entire months.
- Consumption comparison of main meter with check meter/other end meter in terms of KWH, KVAH, MD on each & every month is to be complied checked and if difference of main meter w.r.to check meter/other end meter is more /less than the standardised value or as fixed by UPCL the check-out list is to be submitted.
- Any other comparison, detail, analysis, report etc in desired format of UPCL from time to time for desired period and in desired timeline shall mandatorily be provided by the contractor.
- Complete analysis of all the consumers' along with reports, recommendations/ comments in desired formats complete in all respect shall be submitted by bidder not later than 25th of every month

The Commission has noted the submission made by the Petitioner on Scrutiny of KCC data. **The Commission directs UPCL to constitute a cell in its commercial wing for analysis and monitoring of KCC data including low load factor cases, meter tamper cases etc. The Commission also directs UPCL to submit the report on analysis and monitoring of KCC data on monthly basis by 15th of every month.**

7.1.26 *Collection Efficiency*

The Commission directed UPCL to make efforts to achieve the collection efficiency targets approved by the Commission and also submit the details of number of defaulting consumers disconnected and amount of arrears realized within one month of the end of each quarter.

Petitioner's Submissions

The Petitioner submitted that the Commission vide its Tariff Order dated February 27, 2019 approved the target of collection efficiency for FY 2019-20 as 99.05% and in view of additional energy charge approved by the Commission vide its order dated October 25, 2019 for the period from October 01, 2019 to March 31, 2020, UPCL vide its letter no. 3513/UPCL/RM/L-17, dated

November 05, 2019, fixed/revised the division wise targets of billing efficiency at 87.61%, collection efficiency at 100%, AT&C Losses at 12.39% and revenue collection of Rs. 5.20/unit for FY 2019-20.

The Petitioner also submitted that vide its letter no. 4542/MD/UPCL/I-7, dated May 01, 2019, also fixed the monthly targets of the officers at various levels for checking of consumers, study of consumers as vigilance checks. For recovery of outstanding arrears, the connections of defaulting consumers are being disconnected and notices under Section 3 & 5 of the Uttarakhand (U.P. Government Electricity undertakings (Dues Recovery) Act, 1958) Adaptation and Modification order, 2002 are being issued regularly and the same shall be taken-up more promptly for ensuing early recovery of outstanding arrears.

The Commission has noted the Petitioner's submission in this regard. **The Commission directs UPCL to submit the month wise division wise details of collection of dues by the 15th of the next month and action under the Act may be taken against the Executive Enegineer of those divisions who are found in default of making collections less than the approved collection efficiency.**

7.1.27 *Procurement of Deficit Energy*

UPCL was directed to submit a comprehensive plan as to how it intends to meet the deficit for the next Control Period within one month of the date of Order.

The Petitioner was directed to prepare its power purchase plan for the next three years and initiate the bidding process to meet the deficit, if any. The Petitioner was directed to submit an action plan in this regard within 15 days of the date of Order. The Petitioner was also directed to ensure compliance of the Regulations issued by the Commission from time to time, failing which any consequent liability would be to the account of the Petitioner.

Petitioner's Submissions

UPCL submitted that it has prepared projection of demand upto the year 2021-22. Further, in order to cater increasing demand, UPCL has tied up long term PPAs with Central Sector Generating Stations and UJVN Ltd. The Petitioner further submitted that apart from catering demand from these long term PPAs any additional demand is being catered by Short Term purchase through DEEP Portal and Exchange only. The year wise status of projected power procurement is as follows:

Table 7.3: Details of Year-wise power procurement projected by the Petitioner

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	MU	%	MU	%	MU	%
Demand	14217.08	100%	14572.51	100%	14936.82	100%
Availability (Firm Sources)	12940.44	91.02%	13679.67	93.87%	14542.58	97.36%
Procurement to meet RPO through DEEP Portal	154.67	1.09%	-	-	-	-
Banking*	206.98	1.46%	77.09	0.53%	128.40	0.86%
Deficit/Surplus	**(914.99)**	**6.44%**	**(815.75)**	**5.60%**	**(265.84)**	**1.78%**
Short Term- Tied UP through DEEP Portal	542.60(Apr to Jun 19)	3.82%	611.81	4.20%	199.38	1.33%
IEX	372.39	2.62%	203.94	1.40%	66.46	0.44
Net Deficit(-)/Surplus(+)	0.00	0.00%	0.00	0.00%	0.00	0.00%

The Commission has noted the Petitioner's submission in this regard. **In view of persistent deficit scenario during the Control Period, the Petitioner should put its sincere efforts to procure the deficit energy optimizing the cost of power purchase and reliable power. Further, the procurement should be through transparent process of bidding. UPCL is directed to submit a comprehensive plan as to how it intends to meet the deficit for the next year within one month of the date of this Order.**

The Petitioner is directed to prepare its power purchase plan for the next year and initiate the bidding process to meet the deficit, if any. The Petitioner is directed to submit an action plan in this regard within 15 days of the date of Order. The Petitioner is also directed to ensure compliance of the Regulations issued by the Commission from time to time, failing which any consequent liability would be to the account of the Petitioner.

7.1.28 *Depreciation*

The Commission directed the Petitioner to claim depreciation in line with its practice followed in the accounts.

Petitioner's Submissions

The Petitioner has submitted that Deprecation in the Tariff Petition for FY 2019-20 has been claimed as per direction of the Commission. This practice will also be followed in future.

The Commission directs the Petitioner to claim depreciation in line with its practice followed in the accounts as it capitalises the assets on the last day of the Financial Year.

7.1.29 *Details for changing the threshold level for applicability of kVAh based tariff for LT Industry and Non-Domestic Category*

The Commission directed the Petitioner to submit the complete details for changing the threshold level for applicability of kVAh based tariff for LT Industry and Non-Domestic category including consumption in kWh and kVAh, revenue assessed from such consumers, their Maximum demand, etc. in its next Tariff Petition and the Commission will take a view based on details submitted by the Petitioner.

Petitioner's Submissions

In the ARR and Tariff Petition for FY 2020-21, UPCL has not proposed such conversion from kWh to kVAh billing.

The Commission directs the Petitioner to submit the complete details for changing the threshold level for applicability of kVAh based tariff for LT Industry and Non-Domestic category including consumption in kWh and kVAh, revenue assessed from such consumers, their Maximum demand, etc. in its next Tariff Petition and the Commission will take a view based on details submitted by the Petitioner.

7.1.30 *Energy Audit*

The Petitioner was directed to provide/maintain the metering system at each feeder, 'T' points, DTs and consumers in its distribution network for effective energy auditing and accounting. The Petitioner was directed to submit compliance report in this regard by 30.09.2019.

Petitioner's Submissions

The Petitioner submitted that metering has been completed at all 33 kV substations upto 11 kV and are being maintained and 11,602 DTs have been metered under IPDS/R-APDRP scheme and are being maintained.

The Commission has noted the Petitioner's submission in this regard. **The Petitioner is directed to provide/maintain the metering system at each feeder, 'T' points, DTs and consumers in its distribution network for effective energy auditing and accounting. The Petitioner is also directed to submit compliance report in this regard by September 30, 2020, failing which**

appropriate action may be taken against the Petitioner in accordance with the Act/Rules/Regulations.

7.1.31 *Analysis of Current Liabilities*

The Petitioner was directed to carry out the age-wise analysis of its current liabilities outstanding as on March 31, 2018 and based on the ageing analysis determine how much of the same would be required to be discharged and how much excess provision exists in the same so that the same may be reversed and submit the same to the Commission within 3 months from the date of Order.

Petitioner's Submissions

The Petitioner submitted that the age wise position of creditors for power purchase as on 31-03-2018 and 31-03-2019 is as follows:

Table 7.4: Age-wise Creditors as submitted by the Petitioner

Age	31-03-2018 (Rs. Crore)	31-03-2019 (Rs. Crore)
Age 0 to 3 months	1036.89	1439.57
Age 3 to 6 months	91.35	182.38
Age more than 6 months	1131.67	1427.66
Total	**2259.91**	**3049.60**

UPCL vide its letter no. 3481/UPCL/RM/C-15, dated October 31, 2019 submitted the details of trade payables as on March 31, 2019 having the age more than six months as Rs. 1427.66 Crore.

The Petitioner is directed to carry out the age-wise analysis of its current liabilities outstanding as on March 31, 2019 and based on the ageing analysis determine how much would be required to be discharged the excess provision that exists so that it may be reversed and submit the same to the Commission within 3 months from the date of Order.

7.1.32 *Average Collection Period and Collection Efficiency Ratio*

The Petitioner was directed to submit within 3 months, an action plan to improve its collection period.

The Commission directed UPCL to submit a plan to demonstrate as to how it will work in the direction of improving its actual collection even during initial quarters during a financial year so that the gap between the actual collection efficiency and the collection efficiency approved by the Commission may be brought to minimum.

Petitioner's Submissions

The Petitioner submitted that the average collection period was 96 and 98 days respectively for FY 2017-18 and FY 2018-19.

The Petitioner submitted that in view of additional energy charge approved by the Commission vide its order dated October 25, 2019 for the period from October 01, 2019 to March 31, 2020, UPCL vide its letter no. 3513/UPCL/RM/L-17, dated November 05, 2019, fixed/revised the division wise targets of billing efficiency at 87.61%, collection efficiency at 100%, AT&C Losses at 12.39% and revenue collection of Rs. 5.20/unit for FY 2019-20.

The Petitioner also submitted that vide its letter no. 4542/MD/UPCL/I-7, dated May 01, 2019, also fixed the monthly targets of the officers at various levels for checking of consumers, study of consumers as vigilance checks. For recovery of outstanding arrears, the connections of defaulting consumers are being disconnected and notices under Section 3 & 5 of the Uttarakhand (U.P. Government Electricity undertakings (Dues Recovery) Act, 1958) Adaptation and Modification order, 2002 are being issued regularly and the same shall be taken-up more promptly for ensuing early recovery of outstanding arrears.

The Commission has noted the Petitioner's submission in this regard. **The Petitioner is directed to submit within 3 months, an action plan to improve its collection period. The Commission directs UPCL to submit a plan to demonstrate as to how it will work in the direction of improving its actual collection so that the gap between the actual collection efficiency and the collection efficiency approved by the Commission may be brought to minimum.**

7.1.33 *Inventory Management*

The Petitioner was directed to submit the following details within one month of the date of Order failing which appropriate action will be initiated under the Act:

a) List of inventory as on 31.03.2017.
b) The accounting policies adopted in measuring inventories, including the cost formula used;

c) Basis on which inventories issued: FIFO/LIFO/etc. and reason for choosing the same.
d) Whether any inventory classification has been carried out by UPCL in compliance to the direction given by the Commission vide its letter dated 07.05.2018? If yes the same may be submitted and if no, reason for the same may be furnished?
e) Whether the inventories are verified physically? If yes, the periodicity of the same, alongwith the report of last physical verification. If physical verification is not being conducted reasons for the same?
f) Practice followed by UPCL to record the inventory count during the intervening period, i.e. between the date of physical verification and close of financial year for the purpose of taking the inventory values in its books of accounts.

Petitioner's Submissions

The Petitioner submitted that the list of inventory as on March 31, 2017 has been submitted to the Commission vide UPCL's letter no. 1670/UPCL/RM/C-14, dated April 21, 2018. Accounting policies with respect to measurement of inventory (which is also mentioned in Para 7 under Note no. 28 of Annual Financial Statement of UPCL for FY 2017-18). Stores & Spares at the centralized store are accounted for at Issue Price. Issue Price is chosen in order to ensure/maintain consistency in valuation of issues during the whole accounting year. This also helps in enabling preparation of estimates across all the units of UPCL in a uniform and consistent manner without any variation/deviation. Issues from Decentralized Stores are valued by using FIFO method. Inventory classification has not been done in respect to the inventories lying in the stores. Reason of not carrying out inventory classification is simply that it had not being carried out in past in the organization or erstwhile UPSEB. The centralized inventories are physically verified and inventories of all stores and sub store centers against centralized stores wing of UPCL are physically verified once in a financial year. Physical verification reports of all centralized store centers/sub-store centers against store wing of UPCL, as carried out in financial year 2016-17 were submitted to the Hon'ble Commission vide UPCL's letter no. 1670/UPCL/RM/C-14, dated April 21, 2018. Day to day record of each inventory transaction is kept at store MIS. Accordingly, at the time of each transaction, verification of inventory is also carried out.

The Commission has noted the Petitioner's submission. **The Petitioner with regard to inventory management is directed to submit the following details within one month of the date of Order failing which appropriate action will be initiated under the Act:**

a) **List of inventory as on March 31, 2019.**
b) **The accounting policies adopted in measuring inventories, including the cost formula used;**
c) **Basis on which inventories issued: FIFO/LIFO/etc. and reason for choosing the same.**
d) **Whether any inventory classification, such as ABC analysis has been done? If yes, the same may be submitted and if no, reason for the same may be furnished?**
e) **Whether the inventories are verified physically? If yes, the periodicity of the same, alongwith the report of last physical verification. If physical verification is not being conducted reasons for the same?**

7.2 Fresh Directives

7.2.1 *Voltage-wise Losses*

The Commission directs UPCL to compute voltage-wise losses for each category of consumers and submit the data on voltage wise losses along with next Tariff Petition. (Refer Para 2.10.1.3)

7.2.2 *Improvement of Metering and Billing System*

The Commission has taken note of various suggestions received from the stakeholders regarding improvement in metering and billing and the Commission directs UPCL to consider the suggestions given by the stakeholders to improve its metering and billing system. (Refer Para 2.24.1.3)

The Commission considering the views of the Petitioner and also of the consumers directs UPCL to ensure that the bills are delivered to consumers on time and due date for payment of bills should be specified at least 15 days from the date of delivery of bills to the consumers and not from the date of generation of bills. (Refer: Para 5.1.3.4)

7.2.3 *Proposal for Consultancy Assignments*

UPCL is directed to refrain from carrying out such ineffective consultancies which merely increases its expenditure. UPCL is required to make a proper proposal requiring consultancy assignments to be carried out and the benefits that would accrue from the same and then weigh the cost with the benefits failing which the Commission will be constrained to disallow the costs of such assignments. (Refer: Para 3.1.4.3)

7.2.4 *Capitalisation of Assets*

The Commission is further of the view that unless the complete capitalisation details for FY 2016-17 and FY 2017-18 is provided, truing up for these years shall not be done. The Commission has, however, allowed the impact of capitalisation details submitted for FY 2016-17 and FY 2017-18 in the truing up for FY 2018-19. (Refer: Para 3.2.1)

Moreover, the Petitioner is directed to properly account for these provisions in appropriate heads of accounts. (Refer: Para 4.10.2.3)

7.2.5 *Reconciliation of Grants*

The Petitioner in this regard is directed to reconcile the value of grants so considered by it and that furnished to the Commission for working out the financing of the assets and submit the same in the next tariff proceedings. (Refer: Para 3.2.2.3)

7.2.6 *Open Access Charges*

The Petitioner is hereby directed that the wheeling charges and cross subsidy surcharge recovered from open access customers shall be shown separately under the separate head of income in its ARR/Tariff filings. (Refer: Para 5.4)

7.3 Conclusion

Having considered the submissions made by the Petitioner, the responses of various stakeholders and the relevant provisions of the Electricity Act, 2003 and Regulations of the Commission, the Commission hereby approves that:

(i) Uttarakhand Power Corporation Ltd., the distribution and retail supply licensee in the State will be entitled to charge the tariffs from consumers in its licensed area of supply as given in the Rate Schedule for FY 2020-21 annexed hereto as Annexure-1. These Tariffs will be effective from April 01, 2020.

(ii) Uttarakhand Power Corporation Ltd., the distribution and retail supply licensee in the State will realize from consumers of electricity in the State, miscellaneous charges as listed out in Annexure- 2 of this Order and shall not recover any other charge, fee, deposit etc., unless approved by the Commission.

(iii) The above tariffs shall continue to be applicable till revised by the Commission.

The Petitioner shall forward a report on compliance of the directions given in this Order within the time stipulated for compliance.

M.K. Jain **Member (Technical)**	**D.P. Gairola** **Member (Law)**

8. Annexures

8.1 Annexure 1: Rate Schedule Effective from 01.04.2020

A. General Conditions of Supply

1. Character of Service

i) Alternating Current 50 Hz., single phase, 230 Volts (with permissible variations) up to a load of 4 kW.

ii) Alternating Current 50 Hz, three phase, 4 wire, 400 Volts or above (with permissible variations) for loads above 4 kW depending upon the availability of voltage of supply.

2. Conditions for New Connections

i) Supply to new connections of more than 75 kW (88 kVA) and up to 2550 kW (3000 kVA) shall be released at 11 kV or above, loads above 2550 kW (3000 kVA) and upto 8500 kW (10000 kVA) shall be released at 33 kV or above and loads above 8500 kW (10000 kVA) shall be released at 132 kV or above.

ii) All new connections shall be given with meter conforming to CEA Regulations on Installation and Operation of Meters.

iii) All new 3 phase connections above 4 kW shall be released with Electronic Tri-vector Meter having Maximum Demand Indicator.

iv) All new Single Point Bulk Connection shall be given only for Load of more than 75 kW.

v) Consumers having motive loads of more than 5 BHP shall install Shunt Capacitor of appropriate rating and conforming to BIS specification.

vi) All new connections at HT/EHT should be released only with 3 phase 4 wire meters.

3. Point of Supply

Energy will be supplied to a consumer at a single point.

4. Billing in Defective Meter (ADF/IDF), Meter Not Read/Not Accessible (NA/NR) and Defective Reading (RDF) Cases

In NA/NR cases, the energy consumption shall be assessed and billed as per average consumption of last one year average consumption (as per the Electricity Supply Code) which shall be subject to adjustment when actual reading is taken. Such provisional billing shall not continue for more than two billing cycles at a stretch. Thereafter, the licensee shall not be entitled to raise any bill on provisional basis. In case of Appear defective meter (ADF) Identified defective meter (IDF) and Reading defect (RDF) cases, the consumers shall be billed on the basis of the average consumption of the past three billing cycles immediately preceding the date of the meter being found or being reported defective (as per the Electricity Supply Code). These charges shall be leviable for a maximum period of three months or two billing cycle in case of bi-monthly billing only during which time the licensee is required to replace the defective meter. Thereafter, the licensee shall not be entitled to raise any bill without correct meters.

The checking and replacement of defective meter cases namely IDF and ADF and defective reading cases namely RDF shall be done by the licensee in accordance with the provisions of the Electricity Supply Code as applicable.

5. Billing in case of domestic metered consumers in rural/hilly areas whose meters are not being read

For cases relating to domestic metered consumers in rural/hilly areas, where meter reading is either not being taken regularly or taken randomly over delayed interval of time, the provisional billing under these circumstances for such consumers shall be done at the normative levels of consumption as given below, which shall be subject to annual adjustment based on actual meter reading.

Category	Normative Consumption
Domestic (Rural-Hilly Areas)	30 kWh/kW/month
Domestic (Rural-Other Areas)	50 kWh/kW/month

For this purpose, the contracted load shall be rounded off to next whole number. Billing on this basis is subject to annual adjustment and the licensee is to ensure meter reading of such consumers at least once a year.

6. Billing in New Connection

For cases such as new connections, where past reading is not available, the provisional billing shall be done at the normative levels of consumption as given below, which shall be subject to adjustment when actual reading is taken.

Category	Normative Consumption
Domestic (Urban)	100 kWh/kW/month
Domestic (Rural-Hilly Areas)	30 kWh/kW/month
Domestic (Rural-Other Areas)	50 kWh/kW/month
Non-domestic (Urban)	150 kWh/kW/month
Non-domestic (Rural)	100 kWh/kW/month
Private Tube Wells	60 kWh/BHP/month
Industry	
LT Industry	150 kWh/kW/month
HT Industry	150 kVAh/kVA /month

For this purpose, the contracted load shall be rounded off to next whole number. Billing on this basis shall continue only for a maximum period of 2 billing cycles, during which the licensee should ensure actual reading. Thereafter, the licensee shall not be entitled to raise any bill without correct meter reading. In all other categories, 1st bill shall be raised only on actual reading.

7. Delayed Payment Surcharge (DPS) (for all categories except PTW)

In the event of electricity bill rendered by licensee, not being paid in full within 15 days' grace period after due date, simple interest in the form of a surcharge @ 1.25% per month on the principal amount of the bill which has not been paid, shall be levied from the original due date for each successive month or part thereof until the payment is made in full without prejudice to the right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003. For HT industries and other consumers being billed through Automatic Meter Reading (AMR) system, the DPS shall be levied on the principal amount of the bill which has not been paid from the due date and the facility of grace period shall not be allowed to such consumers. The licensee shall clearly indicate in the bill itself the total amount, including DPS, payable for different dates after the due date, after allowing for the grace period of 15 days, wherever applicable, taking month as the unit.

8. Solar Water Heater rebate

If a consumer installs and uses solar water heating system, rebate of Rs. 100/- p.m. for each 100 litre capacity of the system or actual bill for that month whichever is lower shall be given subject to the condition that consumer gives an affidavit to the licensee to the effect that he has installed such system, which the licensee shall be free to verify from time to time. If any such claim is found to be false, in addition to punitive legal action that may be taken against such consumer, the licensee will recover the total rebate allowed to the consumer with 100% penalty and debar him from availing such rebate for the next 12 months.

9. Prepaid Metering

Prepaid metering scheme approved by the Commission in this Order shall be applicable. A rebate of 4% of energy charges for Domestic category (RTS-1 and RTS-1A) and 3% of energy charges for other LT consumers shall be allowed to the consumers under the Prepaid Metering Scheme from the date of installation and operationalisation of Prepaid Meters. However, no rebate shall be applicable on RTS-9, i.e. Temporary Supply. Solar water rebate as provided above in the Rate Schedule shall be applicable on prepaid consumers also subject to fulfillment of conditions provided therein.

10. Rebate/surcharge for availing supply at voltage higher/lower than base voltage

(i) For consumers having contracted load upto 75 kW/88 kVA - If the supply is given at voltage above 400 Volts and upto 11 kV, a rebate of 5% would be admissible on the Energy Charge.

(ii) For consumers having contracted load above 75 kW/88 kVA – In case the supply is given at 400 Volts, the consumer shall be required to pay an extra charge of 10% on the bill amount calculated at the Energy Charge.

(iii) For consumers having contracted load above 75 kW/88 kVA – In case of supply at 33 kV the consumer shall receive a rebate of 2.5% on the Energy Charge.

(iv) For consumers having contracted load above 75 kW/88 kVA and receiving supply at 132 kV and above, the consumer shall receive a rebate of 7.5% on the Energy Charge.

(v) All voltages mentioned above are nominal rated voltages.

(vi) No rebate or surcharges would be applicable on consumers having pre-paid connections.

11. Low Power Factor Surcharge (not applicable to Domestic, PTW categories and also to other categories having kVAh based Tariff)

(i) On the consumers without Electronic Tri Vector Meters, who have not installed shunt capacitors of appropriate ratings and specifications, a surcharge of 5% on the current energy charges shall be levied.

(ii) On consumers with Electronic Tri Vector Meters, a surcharge of 5% on current energy charges will be levied for having power factor below 0.85 and upto 0.80 and a surcharge of 10% of current energy charges will be levied for having power factor below 0.80.

(iii) No surcharge would be applicable on consumers having pre-paid connections.

12. Excess Load/Demand Penalty (Not applicable to Domestic, Snow bound and PTW categories)

In case of consumers where electronic meters with MDI have been installed, if the maximum demand recorded in any month exceeds the contracted load/demand, charges for such excess load/demand shall be levied equal to twice the normal rate of fixed/demand charge as applicable. Such excess load penalty shall be levied only for the month in which maximum demands exceeds contracted load. However, no excess load penalty would be applicable on consumers having pre-paid connections.

Example:

(i) For consumers where fixed charges on the basis of contracted load/demand have been specified:

Contracted load 30 kW, Maximum Demand 43 kW,

Excess Demand 43-30=13 kW, Rate of Fixed Charges= Rs. 70/kW

Fixed Charges for contracted load = 30 x 70=Rs. 2100

Fixed Charges for excess load = 13x (2 x70) =Rs. 1820

Total Fixed Charges = 2100+1820= Rs. 3920

(ii) For industrial consumers billed on billable demand:

Contracted demand 2500 kVA, Maximum Demand 2800 kVA, Billable Demand =2800 kVA

Excess Demand =2800-2500=300 kVA, Rate of Demand Charges= Rs. 370/kVA

Demand Charges for contracted demand =2500 x 370=Rs. 925000

Demand Charges for excess demand = 300x (2 x 370) =Rs. 222000

Total Demand Charges = 925000+222000= Rs. 1147000

13. Single Point Bulk Supply for Domestic, Non Domestic and Mixed Load Categories

(i) Single Point Bulk Supply connection shall only be allowed for Sanctioned/Contracted Load above 75 kW with single point metering for further distribution to the end users. However, this shall not restrict the individual owner/occupier from applying for individual connection.

(ii) The person who has taken the single point supply shall be responsible for all payments of electricity charges to the Licensee. He is authorized to bill the end consumers as per the approved tariff for the single point bulk supply of the concerned category as per the Rate Schedule and the distribution licensee shall ensure the compliance of the same.

(iii) The person who has taken the single point supply shall also be deemed to be an agent of Licensee to undertake distribution of electricity for the premises for which single point supply is given under seventh proviso to section 14 of the Electricity Act, 2003 and distribution licensee shall be responsible for compliance of all provisions of the Act and Rules & Regulations thereunder within such area.

(iv) Single Point Bulk Supply under "Domestic" shall only be applicable for Residential Colonies/Residential Multistoreyed Buildings including common facilities (such as Lifts, Common Lighting and Water Pumping system) of such Residential Colonies/Residential Multistoreyed Buildings. In case these Residential Colonies/Residential Multistoreyed Buildings also have some shops or other commercial establishments, the tariff of Mixed Load shall be applicable for such premises subject to conditions provided in the Rate Schedule of Mixed Load Category.

(v) Single Point Bulk Supply Under "Non-Domestic" shall only be applicable for Shopping Complexes/Multiplex/Malls.

14. Rounding off

(i) The contracted load/demand shall be expressed in whole number only and fractional load/demand shall be rounded up to next whole number.

Example:

Contracted/Sanctioned Load of 0.15 kW shall be reckoned as 1 kW for tariff purposes. Similarly, contracted/sanctioned load of 15.25 kW/kVA shall be taken as 16 kW/kVA.

(ii) All bills will be rounded off to the nearest rupee.

15. Other Charges

Apart from the charges provided in the Rate of Charge and those included in the Schedule of Miscellaneous Charges, no other charge shall be recovered from the consumer unless approved by the Commission.

B. Tariffs

RTS-1: Domestic

1. Applicability

This schedule shall apply to supply of power to:

(i) Residential premises (including premises of Departmental Employees & Pensioners of UPCL, PTCUL and UJVN Ltd.) for light, fan, power and other domestic purposes including common facilities (such as Lifts, Common Lighting and Water Pumping system)

(ii) Single Point Bulk Supply above 75 kW for Residential Colonies, Residential Multi-storeyed buildings where energy is exclusively used for domestic purpose including common facilities (such as Lifts, Common Lighting and Water Pumping system) of such Residential Colonies/Residential Multistoreyed Buildings

(iii) Places of worship, i.e. Mandir, Masjid, Gurudwara, Church, etc. (only for standalone places of worship and not for the places of worship which have other facilities such as Dharamshala, Community Hall, Dormatories, etc. attached with it)

(iv) Gaushalas/Gausadans and Dairy Farms having load upto 4 kW and consumption upto 600 kWh/ month

(v) Home-stay registered under Deendayal Upadhyay Home-Stay Development Policy Rules, 2018

(This rate schedule shall also be applicable to consumers having contracted load upto 2 kW as also consumption upto 200 kWh/month and who are using some portion of the premises mentioned above for non-domestic purposes. However, if either contracted load for such premises is above 2 kW or consumption is more than 200 kWh/month, then the entire energy consumed shall be charged under the appropriate Rate Schedule unless such load is segregated and separately metered).

2. Rate of Charge

Description	Fixed Charges*	Energy Charges
1) Domestic		
1.1)BPL/Life line consumers		
Below Poverty Line and Kutir Jyoti having load upto 1 kW and consumption upto 60 units per month	Rs. 18/ connection/month	Rs. 1.61/kWh
1.2) Other Domestic Consumers		
Upto 100 units per month	Rs. 60 /month	Rs. 2.80/kWh
101-200 units per month	Rs. 95 /month	Rs. 3.75/kWh
201-400 units per month	Rs. 165/month	Rs. 5.15/kWh
Above 400 units per month	Rs. 260/month	Rs. 5.90/kWh
2) Single Point Bulk Supply	Rs. 85/kW/month	Rs. 4.85/kWh

**Fixed Charges in case of other domestic consumers for the month shall be charged at the rates equivalent to the total consumption in the month.*

RTS-1A: Snowbound

1. Applicability

This schedule shall apply to supply of power to:

(i) Domestic and non-domestic consumers in snowbound areas.

(ii) This Schedule applies to areas notified as snowbound/snowline areas by the concerned District Magistrate.

2. Rate of Charge

Description	Fixed Charges	Energy charges
1) Domestic	Rs.18/connection/month	Rs. 1.61/kWh
2) Non-domestic upto 1 kW		Rs. 1.61/kWh
3) Non-domestic more than 1 kW & upto 4 kW		Rs. 2.36/kWh
4) Non-Domestic more than 4 kW	Rs. 30/connection/month	Rs. 3.51/kWh

3. All other conditions of this Schedule shall be same as those in RTS-1.

RTS-2: Non-Domestic

1. Applicability

This schedule should apply to supply of power to:

1.1 (i) Government/Municipal Hospitals
(ii) Government/Government Aided Educational Institutions
(iii) Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act.

1.2 Small Non Domestic Consumers with connected load upto 4 kW and consumption upto 50 units per month.

1.3 Other Non-Domestic Users including single point bulk supply above 75 kW for shopping complexes/multiplex/malls including common facilities (such as lifts, common lighting and water pumping system).

1.4 Independent Advertisement Boards/Hoardings - All commercial (road side / roof top or on the side of the buildings etc.) standalone independent advertisement hoardings such as private advertising sign posts/ sign boards/ sign glows/flex that are independently metered through a separate meter.

2. Rate of Charge

S. No.	Description	Fixed Charges	Energy charges
1.1	(i) Government/Municipal Hospitals (ii) Government/Government Aided Educational Institutions (iii) Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act		
	(a) Upto 25 kW	Rs. 70/ kW	Rs. 4.60/ kWh
	(b) Above 25 kW	Rs. 80/ kVA	Rs. 4.35/ kVAh
1.2	**Other Non-Domestic Users**		
	(a) Small Non-Domestic Consumers with connected load upto 4 kW and consumption upto 50 units per month*	Rs. 70 / kW	Rs. 4.70/ kWh
	(b) Others upto 25 kW not covered in 1.2(a) above	Rs. 85 / kW	Rs. 5.75/ kWh
	(c) Above 25 kW	Rs. 85 / kVA	Rs. 5.60/ kVAh
1.3	Single Point Bulk Supply**	Rs. 85 / kVA	Rs. 5. 65/ kVAh
1.4	Independent Advertisement Hoardings	Rs. 100/kW	Rs. 6.25/kWh

** If consumption exceeds 50 units/month, then on the entire energy consumed tariff as per sub-category 1.2(b) shall be charged*

*** For loads above 75 kW for shopping complexes/multiplex/malls*

3. Other Conditions

3.1 ToD Meters shall be read by Meter Reading Instrument (MRI) only with complete dump with phasor diagram, Tamper Reports, full load survey reports etc. shall be downloaded for the purpose of complete analysis.

3.2 All consumers above 25 kW shall necessarily have ToD Meters.

3.3 No meter shall be read at zero load or very low load. Licensee shall carry appropriate external load and shall apply the same, wherever, necessary to take MRI at load.

3.4 Copy of MRI Summary Report shall be provided alongwith the Bill. Full MRI Report including load survey report shall be provided on demand and on payment of Rs. 15/ Bill.

RTS-3: Govt. Public Utilities

1. Applicability

This schedule shall apply to supply of power to:

(i) Public lamps including street lighting system, traffic control signals, lighting of public parks, etc. The street lighting of Harijan Bastis and villages are also covered by this Rate Schedule.

(ii) State Tubewells, World Bank Tubewells, Pumped Canals and Lift irrigation schemes, Laghu Dal Nahar etc.,

(iii) Irrigation system owned and operated by any Government department.

(iv) Public Water Works, Sewage Treatment Plants and Sewage Pumping Stations functioning under Jal Sansthan, Jal Nigam or other local bodies and Plastic Recycling Plants.

2. Rate of Charge

Category	Fixed Charges*	Energy Charge
Urban (Metered)	Rs. 70/kVA/month	Rs. 5.40/ kVAh
Rural (Metered)	Rs. 60/kVA/month	Rs. 5.40/ kVAh

** The Urban and Rural differentiation will apply only for supply of power to 1(i) & 1(iv) above.*

3. Maintenance Charge for Public Lamps

In addition to the "Rate of Charge" mentioned above, a sum of Rs. 10/- per light point per month shall be charged for operation and maintenance of street lights covering only labour charges where all material required will be supplied by the local bodies. However, the local bodies will have the option to operate and maintain the public lamps themselves and in such case no maintenance charge will be charged.

4. Provisions of Street Light Systems

In case, the maintenance charge, as mentioned above, is being charged then the labour involved in the subsequent replacement or renewals of lamps shall be provided by the licensee but all the material shall be provided by the local bodies. If licensee provides material at the request of local body, cost of the same shall be chargeable from the local body.

The cost involved in extension of street light mains (including cost of sub-stations if any) in areas where distribution mains of the licensee have not been laid, will be paid for by the local bodies.

RTS-4: Private Tube Wells/ Pumping Sets

1. Applicability

This schedule shall apply to supply of power to private tube-wells/pumping sets for irrigation purposes and for incidental agricultural processes confined to chaff cutter, thrasher, cane crusher and rice huller only. However, the tariff applicable for RTS-4 shall only be applicable if such incidental agricultural processes are being carried out for agricultural produce of the connection sanctioned for irrigation purposes.

2. Rate of charge

Category	Fixed Charges Rs./BHP/Month	Energy Charges Rs./kWh
RTS 4: PTW (Metered)	Nil	2.03

3. Payments of bills and Surcharge for Late Payment

The bill shall be raised for this category twice a year only, i.e. by end of December (for period June to November) and end of June (for period December to May). The bill raised in December may be paid by the consumer either in lump-sum or in parts (not more than four times) till 30th April next year for which no DPS shall be levied. Similarly, bill raised in June may be paid by 31st October without any DPS. In case consumer fails to make payment within the specified dates, a surcharge @ 1.25% per month for the period (months or part thereof) shall be payable on the principal outstanding amount of the Bill as per clause 7 of the General Conditions of Supply.

RTS-4A: Agriculture Allied Activities

1. Applicability

This schedule shall apply to supply of power for use in nurseries growing plants/saplings, polyhouses and other units growing flowers/vegetables and fruits including mushroom cultivation which does not involve any kind of processing of product except for storing and preservation.

2. Rate of charge

Category	Fixed Charges Rs./BHP/Month	Energy Charges Rs./kWh
RTS 4(A): Agricultural Allied Services	Nil	2.25

RTS-5: LT and HT Industry

1. Applicability

This schedule shall apply to supply of power to:

(i) Industries and /or processing or agro- industrial purposes, power loom as well as to Arc/Induction Furnaces, Rolling/Re-rolling Mills, Mini Steel Plants and to other power consumers not covered under any other Rate Schedule.

(ii) The vegetable, fruits, floriculture & Mushroom integrated units engaged in processing, storing and packaging in addition to farming and those not covered under RTS-4A shall also be covered under this Rate Schedule.

2. Specific Conditions of Supply

(i) All connections shall be connected with MCB (Miniature Circuit Breaker) or Circuit Breaker / Switch Gear of appropriate rating and BIS Specification.

(ii) The supply to Induction and Arc Furnaces shall be made available only after ensuring that the loads sanctioned are corresponding to the load requirements of tonnage of furnaces. The minimum load of 1 Tonne furnace shall in no case be less than 400 kVA and all loads will be determined on this basis. No supply will be given for loads below this norm.

(iii) Supply to Steel Units shall be made available at a voltage of 33 kV or above through a dedicated individual feeder only with check meter at sub-station end. Difference of more than 3%, between readings of check meter and consumer meter(s), shall be immediately investigated by the licensee and corrective action shall be taken.

(iv) Supply to all new connections with load above 1000 kVA should be released on independent feeders only with provisions as at (iii) above.

Description	Energy Charge		Fixed /Demand Charge per month
1. LT Industry having contracted load upto 75kW (100 BHP)			
1.1 Contracted load up to 25 kW	Rs. 4.60/kWh		Rs. 155/ kW of contracted load
1.2 Contracted load more than 25 kW	Rs. 4.25/kVAh		Rs. 150/ kVA of contracted load
2. HT Industry having contracted load above 88 kVA/75 kW (100 BHP)	Load Factor#	Rs./ kVAh	
2.1 Contracted Load up to 1000 kVA	Upto 40%	4.20	Rs. 310/kVA of the billable demand*
	Above 40%	4.60	
2.2 Contracted Load More than 1000 kVA	Upto 40%	4.20	Rs. 370/kVA of the billable demand*
	Above 40%	4.60	

** Billable demand shall be the actual maximum demand or 80 % of the contracted load whichever is higher.*

#For tariff purposes Load Factor (%) would be deemed to be =

$$\frac{\text{Consumption (excluding the energy received through open access) during the billing period}}{\text{Maximum Demand or Contracted Demand whichever is less x No. of hours in the billing period}} \times 100$$

Provided that in cases where maximum demand during the month occurs in a period when open access is being availed by the consumer, then maximum demand for the purpose of computation of load factor shall be that occurring during the period when no open access is being availed.

3. Time of Day Tariff

(i) The rates of energy charge given above for LT industry with load more than 25 kW and HT industry shall be subject to ToD rebate/surcharge.

(ii) ToD Meters shall be read by Meter Reading Instrument (MRI) only with complete dump with phasor diagram, Tamper Reports, full load survey reports etc. shall be downloaded for the purpose of complete analysis and bills shall be raised as per ToD rate of charge.

(iii) No meter shall be read at zero load or very low load. Licensee shall carry appropriate external load and shall apply the same, wherever, necessary to take MRI at load.

(iv) Copy of MRI Summary Report shall be provided along with the Bill. Full MRI Report including load survey report shall be provided on demand and on payment of Rs. 15/ Bill.

(v) ToD Load shall be as under:

Season/Time of day	Morning Peak hours	Normal hours	Evening Peak Hours	Off-peak Hours
Winters 01.10 to 31.03	0600-0900 hrs	0900-1800 hrs	1800-2200 hrs	2200-0600 hrs
Summers 01.04 to 30.09	--	0700-1800 hrs	1800-2300 hrs	2300-0700 hrs

The, ToD Rate of Energy Charges shall be as under:

For LT Industry

Energy Charge during		
Normal Hours	**Peak Hours**	**Off-peak Hours**
Rs. 4.25/kVAh	Rs. 6.38/kVAh	Rs. 3.61/kVAh

For HT Industry

Load Factor*	Energy Charge during		
	Normal Hours	**Peak Hours**	**Off-peak Hours**
Upto 40%	Rs. 4.20/kVAh	Rs. 6.90/kVAh	Rs. 3.57/kVAh
Above 40%	Rs. 4.60/kVAh	Rs. 6.90/kVAh	Rs. 3.91/kVAh

** Load Factor shall be as defined in Clause 2 above*

4. Seasonal Industries

Where a consumer having load in excess of 18 kW (25 BHP) and ToD meter and avails supply of energy for declared Seasonal industries during certain seasons or limited period in the year, and his plant is regularly closed down during certain months of the financial year, he may be levied for the months during which the plant is shut down (which period shall be referred to as off-season period) as follows:

(i) The tariff for 'Season' period shall be same as "Rate of Charge" as given in this schedule.

(ii) Where actual demand in 'Off Season' Period is not more than 30% of contracted load, the energy charges for "Off-Season" period shall be same as energy charges for "Season" period given in Rate of Schedule above. However, the contracted demand in the "Off Season" period shall be reduced to 30%.

(iii) During 'Off-season' period, the maximum allowable demand will be 30% of the contracted demand and the consumers whose actual demand exceeds 30% of the contracted demand in any month of the 'Off Season' will be denied the above benefit of reduced contracted demand during that season. In addition, a surcharge at the rate of 10% of the demand charge shall be payable for the entire 'Off Season' period.

Terms and Conditions for Seasonal Industries

(i) The period of operation should not be more than 9 months in a financial year.

(ii) Where period of operation is more than 4 months in a financial year, such industry should operate for at least consecutive 4 months.

(iii) The seasonal period once notified cannot be reduced during the year. The off-season tariff is not applicable to composite units having seasonal and other categories of loads.

(iv) Industries in addition to sugar, ice, rice mill, frozen foods and tea shall be notified by Licensee only after prior approval of the Commission.

5. Factory Lighting

The electrical energy supplied under this schedule shall also be utilised in the factory premises for lights, fans, coolers, etc. which shall mean and include all energy consumed for factory lighting in the offices, the main factory building, stores, time keeper's office, canteen, staff club, library, creche, dispensary, staff welfare centres, compound lighting, etc.

6. Continuous and Non-continuous supply

(i) Continuous Process Industry as well as non continuous process industrial consumers connected on either independent feeders or industrial feeder can opt for continuous supply. For industrial feeder, all connected industries will have to opt for continuous supply and in case any consumer on industrial feeder does not wish to opt for continuous supply, all the consumers on such feeder will not be able to avail continuous supply. Such Industrial consumers who opt for continuous supply shall be exempted from load shedding during scheduled/unscheduled power cuts and during restricted hours of the period of restriction in usage approved by the Commission from time to time, except load shedding required due to emergency breakdown/shutdown.

(ii) Consumers who are existing Continuous Supply Consumers shall continue to remain Continuous Supply Consumers and they need not apply again for seeking continuous supply. Such consumers shall pay 7.5% extra energy charges, in addition to the energy charges given above, w.e.f. April 01, 2020 till March 31, 2021. However, in case of any pending dispute with UPCL in the matter of continuous supply on certain feeders, those consumers will have to apply afresh, for availing the facility of continuous supply, by April 30, 2020.

(iii) The existing consumers who are new applicants for continuous supply of power (including those who are applying afresh as per above) can apply for seeking the continuous supply option at any time during the year. However, continuous supply surcharge for such consumers shall be applicable with effect from May 1, 2020 till March 31, 2021. UPCL shall provide the facility of continuous supply within 7 days from the date of application, subject to fulfilment of Conditions of Supply.

(iv) In case of re-arrangement of supply through independent feeder, UPCL shall provide the facility of continuous supply from the date of completion of work of independent feeder subject to fulfilment of Conditions of Supply and the Continuous Supply Surcharge on such consumers shall be applicable from the date of energisation of aforesaid independent feeder till March 31, 2021, irrespective of actual period of continuous supply option.

(v) In case of a new consumer (new connection) opting continuous supply, 7.5% extra energy charges as Continuous Supply Surcharge shall be applicable from the date of new connection till March 31, 2021, irrespective of the actual period of continuous supply.

(vi) The existing consumers availing continuous supply option, who wish to discontinue the continuous supply option granted to them earlier, will have to communicate, in writing, to UPCL latest by April 30, 2020 and they shall continue to pay continuous supply surcharge alongwith the tariff approved in this Order till April 30, 2020. Further, in this regard, if due to withdrawal by one consumer from availing continuous supply option on a particular feeder, supplying to other continuous supply consumers as well, the status of other continuous supply consumers on that feeder is affected, then UPCL shall inform all the affected consumers in writing, well in advance.

(vii) The Continuous Supply Surcharge shall not be applicable on the power procured by the industrial consumers through open access.

(viii) UPCL shall not change the status of a continuous supply feeder to a non-continuous supply feeder.

(ix) UPCL/PTCUL shall take up augmentation, maintenance and overhauling works on top priority, specially in the sub-stations where circuit breakers, other equipment, etc. are in dilapidated condition and, thereby, shall ensure minimisation of interruptions of the continuous supply feeders.

(x) UPCL/PTCUL shall carry out periodical preventive maintenance of the feeders supplying to continuous supply consumers. The licensees shall prepare preventive maintenance schedule, in consultation with continuous supply consumers, well in advance, so that such consumers can plan their operations accordingly.

(xi) The Licensee should show the energy charges and continuous supply surcharge thereon separately in the bills.

7. Demand Charges for HT Industry

If the minimum average supply to any HT Industry Consumers is less than 18 hours per day during the month, the Demand Charges applicable for such HT Industry Consumer shall be 80% of the approved Demand Charges for HT Industry.

RTS 6: Mixed Load

1. Applicability

This schedule applies to single point bulk supply connection of more than 75 kW where the supply is used predominantly for domestic purposes (with more than 60% domestic load) and also for other non-domestic purposes. This schedule also applies to supply to MES.

2. Rate of Charge

The following rates shall apply to consumers of this category

Fixed Charges	Energy Charges
Rs. 90/kW/month	Rs. 5.30/kWh

3. Other conditions

Apart from the above, other conditions of tariff shall be same as those for RTS-1 consumers. However, excess load penalty shall be applicable as per clause 12 of General Conditions of Supply.

RTS 7: Railway Traction

1. Applicability

This schedule applies to Railways utilizing power for traction purposes.

2. Rate of Charge

The following rates of energy and demand charge shall apply to this category:

Demand Charges	Energy Charges
Rs./kVA/month	Rs./ kVAh
250/-	Rs. 4.65

3. Other conditions

Apart from the above, other conditions of tariff shall be same as those for General HT Industries under RTS-5 consumers except applicability of ToD tariff and surcharge for continuous supply.

RTS 8: Electric Vehicle Charging Stations

1. Applicability

This schedule applies to Public Electric Vehicle Charging Stations set up for providing Electric Vehicle Charging facilities on commercial basis.

2. Rate of Charge

The following rates of energy and demand charge shall apply to this category:

FixedCharges	Energy Charges
Rs./kW/month	Rs./ kWh
---	Rs. 5.50

RTS-9: Temporary Supply

1. Applicability

(i) This schedule shall apply to temporary supplies of light, fan and power loads for all purposes including illumination/public address/ceremonies and festivities/functions/ temporary shops not exceeding three months.

(ii) This schedule shall also apply for power taken for construction purposes including civil work by all consumers including Government Departments. Power for construction purposes for any work / project shall be considered from the date of taking first connection for the construction work till completion of the work / project.

However, use of electricity through a permanent connection sanctioned for premises owned by the consumer for construction, repair or renovation of existing building, shall not be considered as unauthorised use of electricity as long as the intended purpose/use of the building/apartments being constructed is same/permissible in the sanctioned category of the connection.

2. Rate of Charge

The rate of charge will be corresponding rate of charge in appropriate Schedule Plus 25%. The appropriate rate schedule for the temporary supplies for cane crusher upto 15 BHP given for maximum period of four (4) months will be RTS-5.

8.2 Annexure 2: Schedule of Miscellaneous Charges

Sl. No	Nature of Charges	Unit	Approved (Rs.)
1	**Checking and Testing of Meters**		
	a. Single Phase Meters	Per Meter	50.00
	b. Three Phase Meters	Per Meter	75.00
	c. Recording Type Watt-hour Meters	Per Meter	170.00
	d. Maximum Demand Indicator/ LT CT operated Meters	Per Meter	350.00
	e. Tri-vector Meters/ HT Meters with CT/PT	Per Meter	1000.00
	f. Ammeters and Volt Meters	Per Meter	65.00
	g. Special Meters	Per Meter	335.00
	h. Initial Testing of Meters	Per Meter	NIL
2	**Subsequent testing and installation other than initial testing**	Per Meter	80.00
3	**Disconnection and Reconnection of supply on consumers request or non-payment of bill (for any disconnection or reconnection the charge will be 50%)**		
	a. Consumer having load above 100 BHP/75 kW	Per Job	600.00
	b. Industrial and Non Domestic consumers upto 100 BHP/75 kW	Per Job	400.00
	c. All other categories of consumers	Per Job	200.00
4	**Replacement of Meters**		
	a. Installation of Meter and its subsequent removal in case of Temporary Connections	Per Job	75.00
	b. Changing of position of Meter Board at the consumer's request	Per Job	100.00
5	Checking of Capacitors (other than initial checking) on consumer's request:		
	a. At 400 V/ 230 V	Per Job	150.00
	b. At 11 kV and above	Per Job	300.00

8.3 Annexure 3: Public Notice

UTTARAKHAND POWER CORPORATION LIMITED

(A Govt. of Uttarakhand Undertaking) Corporate Identity No. U40109UR2001SGC025867/2358

Victoria Cross Vijeta Gabar Singh Urja Bhawan, Kanwali Road, Dehradun, Tel. No.: 0135-2762444, Fax No. 0135-2763839, E-mail ID:-cecommercialupcl@gmail.com

PUBLIC NOTICE

Inviting Comments on the Petition for True-up of FY 2018-19, Annual Performance Review of FY 2019-20 and determination of Annual Revenue Requirement for FY 2020-21 filed by UPCL before the Uttarakhand Electricity Regulatory Commission

Salient Points of the ARR/Tariff Petition

1. Uttarakhand Power Corporation Limited (UPCL), the sole Distribution and Retail Supply Licensee in the State, has filed a Petition before Uttarakhand Electricity Regulatory Commission (UERC or Commission) for determination of Annual Revenue Requirement (ARR) for FY 2020-21 and has sought revision in Retail Tariffs to be charged from different category of electricity consumers in the State for FY 2020-21.
2. Through the above Petition, UPCL has also sought truing up of expenses for FY 2018-19 (based on audited accounts). The summary of the revised ARR and the revised revenue Gap for FY 2018-19 and projected ARR & projected Revenue gap for FY 2020-21 are given in the following Table:

(Figures in Rs. Crore)

S. No.	Particulars	FY 2018-19		FY 2019-20		FY 2020-21
		Approved by the Commission	Final truing up claimed by UPCL	Approved by the Commission	Revised Estimates submitted by UPCL	Projected by UPCL
A.	**Expenditure**					
1	Power Purchase Expenses	4932.43*	5123.81	5402.91#	5279.49	5590.69
2	UJVN Ltd.'s arrears	-47.09		-2.17		
3	SLDC charges	16.84	311.88	11.35	266.36	415.45
4	Transmission Charges-PTCUL	192.46		255.01		
5	Transmission Charges-PGCIL	388.08	437.10	509.73	475.85	373.37
6	O&M expenses	505.57	518.02	551.96	591.40	743.60
7	Interest charges (including interest on consumers security deposit)	132.88	140.98	137.06	167.73	192.39
8	Guarantee Fee	5.59	3.04	5.36	3.04	3.04
9	Depreciation	142.42	122.80	143.38	173.12	201.30
10	Return on Equity	78.24	106.70	90.11	126.48	153.25
11	Interest on Working Capital	0.00	0.00	0.00	0.00	18.13
12	Net Impact of Gain/(Loss) Sharing	0.00	12.28	0.00	0.00	0.00
13	**Gross Expenditure**	**6347.43**	**6776.40**	**7104.70**	**7083.47**	**7689.24**
B.	Less: Non-tariff income	155.26	244.41	250.00	244.41	244.41
	True up impact of previous year	64.78	64.78	-305.31	-305.31	153.24
	Past year adjustment	-158.71	-158.71	0.00	0.00	-
	Adjustment of free power	-100.74	-100.74	0.00	0.00	-
C.	**Aggregate Revenue Requirement**	**5997.50**	**6337.32**	**6549.39**	**6533.75**	**7598.08**
D.	Revenues from Existing/Approved Tariffs	6013.19	6211.19$	6592.52	-	7062.37
E.	**Revenue Surplus/(Gap) (C-D)**	**15.69**	**(126.14)**	**43.13**	**-**	**(535.71)**

***Including Water tax**
 # Including RPO
$ Including AEC approved by the commission of Rs. 295.95 Crore

3. UPCL has, accordingly, projected a total revenue gap of Rs. 535.71 Crore.
4. For FY 2020-21, UPCL has projected the distribution loss level of 14.00% based on the loss trajectory proposed in the business plan. It is also to mention that for projecting the power purchase cost for FY 2020-21 from UJVN Ltd. stations and Central Sector Generating Stations, UPCL has considered AFC in FY 2019-20 based on actual half yearly data and multiplied it by two for the complete year, and used an escalation rate of 4% per annum to arrive at AFC for FY 2020-21. Further, the variable and other cost for same stations have been projected based on the per unit rate of the actual half yearly data for FY 2019-20 which is then multiplied by the total energy to project the variable and other cost for the complete year and used an escalation rate of 4% per annum to arrive at variable and other cost for FY 2020-21. Inter-state transmission charges (PGCIL charges) have been projected on "per unit basis", i.e. power projected to be procured from outside based on the actual per unit cost paid from April, 2019 to September, 2019 escalated by 5%. UPCL has considered the Intra-state transmission charges (PTCUL charges) and SLDC charges as per ARR approved by the Commission for PTCUL in MYT Order dated 27.02.2019.
5. UPCL has proposed to recover the revenue gap of Rs. 535.71 Crore relating to true up for FY 2018-19 and projected ARR & tariff for FY 2020-21 through tariff hike in the FY 2020-21. UPCL has, accordingly, proposed an average tariff hike of 7.70% in the existing retail tariffs of consumers.
6. Further, PTCUL, SLDC and UJVN Ltd. have also submitted their ARR and Tariff Petition for the FY 2020-21 before the Commission. If all the claims as proposed are accepted by the Commission it would necessitate a hike of 13.31% in consumer tariffs for FY 2020-21.
7. UPCL has proposed to revise the applicable tariffs for FY 2020-21 to meet the revenue gap of Rs. 535.71 Crore.

The tariff proposals are as below:

Category	Fixed/Demand Charges		Energy Charges		
	Existing	Proposed	Existing		Proposed
			Energy Charges	Additional Energy Charge	
RTS-1: DOMESTIC					
1.1 Life line consumers	Rs.18/Connection/month	Rs. 18/Connection/month	Rs. 1.61/kWh	Rs. 0.22/kWh	Rs. 1.90/kWh
1.2 Other domestic consumers					
(i) Upto 100 Units/month	Rs. 55/connection/month	Rs. 75/connection/month	Rs. 2.75 /kWh	Rs. 0.39 /kWh	Rs. 3.26 /kWh
(ii) 101-200 Units/month	Rs. 85/connection/month	Rs. 135/connection/month	Rs. 3.55 /kWh	Rs. 0.39 /kWh	Rs. 5.25 /kWh
(iii) 201-400 Units/month	Rs. 145/connection/month		Rs. 4.90 /kWh	Rs. 0.39 /kWh	
(iv) Above 400 Units/month	Rs. 230/connection/month		Rs. 5.65 /kWh	Rs. 0.39 /kWh	
1.3. Single Point Bulk Supply above 75 kW	Rs. 75 /kW/month	Rs. 85 /kW/month	Rs. 4.40 /kWh	Rs. 0.39 /kWh	Rs. 4.85 /kWh
RTS-1A: Snowbound					
Domestic	Rs. 18/connection/month	Rs. 25/Connection/month	Rs. 1.61 /kWh	-	Rs. 1.61 /kWh
Non-Domestic upto 1 kW			Rs. 1.61 /kWh	-	Rs. 1.61 /kWh
Non-Domestic above 1 kW & upto 4 kW			Rs. 2.36 /kWh	-	Rs. 2.36 /kWh
Non-Domestic above 4 kW	Rs. 30/connection/month	Rs. 40/connection/month	Rs. 3.51 /kWh	-	Rs. 3.51 /kWh
RTS-2: Non-Domestic					
1. (i) Government/Municipal Hospitals (ii) Government/Government Aided Educational Institutions (iii) Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act					
1.1 Upto 25 kW	Rs. 65 /kW/month	Rs. 90 /kW/month	Rs. 4.50 /kWh	Rs. 0.56 /kWh	Rs. 5.00 /kWh
1.2 Above 25 kW	Rs. 75 /kVA/month	Rs. 100 /kVA/month	Rs. 4.25 /kVAh	Rs. 0.53 /kVAh	Rs. 4.80 /kVAh
2. Other non-Domestic/Commercial Users					
2.1 Small shops (Load upto 4 KW & consumption upto 50 units pm)	Rs. 70 /kW/month	Rs. 80 /kW/month	Rs. 4.70 /kWh	Rs. 0.56 /kWh	Rs. 4.85 /kWh
2.2 Upto 25 kW other than above	Rs. 75 /kW/month	Rs. 90/kW/month	Rs. 5.60 /kWh	Rs. 0.56 /kWh	Rs. 6.45 /kWh
2.3 Above 25 kW	Rs. 75 /kVA/month	Rs. 90 /kVA/month	Rs. 5.45 /kVAh	Rs. 0.53 /kVAh	Rs. 6.15 /kVAh
3. Single Point Bulk Supply above 50 kW	Rs. 75 /kVA/month	Rs. 90 /kVA/month	Rs. 5.50 /kVAh	Rs. 0.53 /kVAh	Rs. 6.20 /kVAh
4.0 Independent Advertisement Hoardings	Rs. 90 /kW/month	-	Rs. 6.10 /kWh	Rs. 0.56 /kWh	-

RTS-3: Govt. Public Utilities					
1. Metered (Urban)	Rs. 60 /kVA/month	Rs. 100 /kVA/month	Rs. 5.20 /kVAh	Rs. 0.47 /kVAh	Rs. 5.80 /kVAh
2. Metered (Rural)	Rs. 50 /kVA/month	Rs. 90 /kVA/month	Rs. 5.20 /kVAh	Rs. 0.47 /kVAh	Rs. 5.80 /kVAh
RTS-4: Private Tube-wells / Pumping sets					
1. Metered	-	-	Rs. 1.95 /kWh	Rs. 0.18 /kWh	Rs. 2.15 /kWh
RTS-4A: Agriculture Allied Activities					
1. Metered	-	-	Rs. 1.95 /kWh	Rs. 0.18 /kWh	Rs. 2.15 /kWh
RTS-5: LT & HT Industry					
LT Industries- Contracted load upto 75kW (100 BHP)					
1.2 LT Industries (Upto 25 kW)	Rs. 145 /kW/month	Rs. 180 /kW/month	Rs. 4.35 /kWh	Rs. 0.53 /kWh	Rs. 4.80 /kWh
1.3 LT Industries (above 25kW & upto 75 kW)	Rs. 145 /kVA/month	Rs. 180 /kVA/month	Rs. 4.00 /kVAh	Rs. 0.50 /kVAh	Rs. 4.40 /kVAh
HT Industries (above 75 KW/88KVA)					
2.1 Contracted load upto 1000 kVA					
1- Load factor upto 40%	Rs. 300 /kVA of billable demand/month	Rs. 350 /kVA of billable demand/month	Rs. 3.95 /kVAh	Rs. 0.50 /kVAh	Rs. 4.40 /kVAh
2-Load factor above 40%	Rs. 300 /kVA of billable demand/month	Rs. 350 /kVA of billable demand/month	Rs. 4.35 /kVAh	Rs. 0.50 /kVAh	Rs. 4.75 /kVAh
2.2 Contracted load above 1000 kVA					
1- Load factor upto 40%	Rs. 360 /kVA of billable demand/month	Rs. 445 /kVA of billable demand/month	Rs. 3.95 /kVAh	Rs. 0.50 /kVAh	Rs. 4.40 /kVAh
2-Load factor above 40%	Rs. 360 /kVA of billable demand/month	Rs. 445 /kVA of billable demand/month	Rs. 4.35 /kVAh	Rs. 0.50 /kVAh	Rs. 4.75 /kVAh
RTS-6: Mixed Load					
Mixed Load Single Point Bulk Supply above 75 kW including MES	Rs. 80 /kW/month	Rs. 110 /kW/month	Rs. 5.05 /kWh	Rs. 0.49 /kWh	Rs. 5.70 /kWh
RTS-7: Railway Traction					
Railway Traction	Rs. 250 /kVA/month	Rs. 320 /kVA/month	Rs. 4.40 /kVAh	Rs. 0.49 /kVAh^	Rs. 5.00 /kVAh
RTS-8: Electric Vehicle Charging Station					
Electric Vehicle Charging Station	-	-	-	-	Rs. 6.00 /kWh

^- Erroneously submitted as Rs. 0.49/kWh in the Petition

ToD charges for the Industries:

Industries	Rate of charge during		
	Normal hours	Peak hours	Off-peak hours
LT Industries	Rs. 4.40/kVAh	Rs. 6.60/kVAh	Rs. 3.75/kVAh
	HT Industries with Load Factor		
Upto 40%	Rs. 4.40/kVAh	Rs. 7.13/kVAh	Rs. 3.75/kVAh
Above 40%	Rs. 4.75/kVAh	Rs. 7.13/kVAh	Rs. 4.05/kVAh

8. In addition, UPCL has also proposed following Tariff Rationalisation measures:
   (a) To reduce the no. of slabs under domestic category to two : 0-100 kWh and above 100 kWh.
   (b) Merge the independent advertisement hoarding category with non-domestic category of load upto 25 kW.
   (c) Introduction of new category RTS-8 (Electrical Vehicle Charging System).
   (d) Abolition of grace period.
   (e) Modification in prepaid metering scheme.
   (f) Revision in the conditions and tariffs of single point bulk supply.
9. Responses/suggestions, if any, are sought from consumers and other stakeholders on the Petition. Responses may be sent to the Secretary, Uttarakhand Electricity Regulatory Commission, either in person, or by post at 'Vidyut Niyamak Bhawan', Near ISBT, PO-Majra, Dehradun-248171 or through e-mail to secy.uerc@gov.in by 31.01.2020. Responses/suggestions, if any, may also be dropped at the drop boxes installed at every sub-stations of UPCL in an envelope addressed to Secretary, Uttarakhand Electricity Regulatory Commission by the stipulated date.
10. Detailed Petition can be seen free of cost on any working day at the Commission's office or at the offices of Chief Engineer (Commercial) at Victoria Cross Vijeta Gabar Singh Urja Bhawan, Kanwali Road, Dehradun/Chief Engineer (Distribution), Garhwal Zone, UPCL, 120-Haridwar Road, Dehradun/Chief Engineer (Distribution), Kumaon Zone, UPCL, 132-KV Substation, Kathgodam, Haldwani/ Chief Engineer (Distribution), Haridwar Zone, UPCL, Roshnabad, Haridwar / Chief Engineer (Distribution), Udham Singh Nagar Zone, UPCL, 33KV Sub-Station, Sector-2, SIDCUL, Pantnagar, Rudrapur-263153. Relevant extracts can also be obtained from the above mentioned offices of the Petitioner
11. The Petition is also available at the website of the Commission (www.uerc.gov.in) and at the Petitioner's website (www.upcl.org).

No.: 37/EE(CM)/UPCL/A-2 Dt. 21.12.2019 **Managing Director**

SAVE ELECTRICITY IN THE INTEREST OF THE NATION, Use L.E.D Bulb to Save Electricity (Toll Free No. 1800 419 0405 or 1912)

" Pay Electricity Bill Online 24 x 7 from www.upcl.org " (For information on Electricity theft, Informer may report to Toll Free No. 1800 180 4185/ Fax: 0135-2760911)

8.4 Annexure 4: List of Respondents

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Ashok Shukla	-	M/s V.N. Plastics Pvt. Ltd.	D-3, Dev Bhoomi Industrial Estate, Bantakhedi, Roorkee-247668, Haridwar, Uttarakhand
2.	Sh. P.K. Rajput	Executive Director	M/s Alps Industries Ltd.	57/2, Site-IV Industrial Area, Sahibabad, Ghaziabad-201010, Uttar Pradesh
3.	Sh. Vikas Singh	Asstt. Vice President (Operations)	M/s Hindustan National Glass & Industries Ltd.	Virbhadra, Rishikesh-249202, Dehradun
4.	Sh. Munish Talwar	-	M/s Asahi India Glass Ltd.	Integrated Glass Plant, Village-Latherdeva Hoon, Manglaur-Jhabrera Road, P.O. Jhabrera, Tehsil Roorkee, Distt. Haridwar, Uttarakhand
5.	Sh. Shakeel A. Siddiqui	Vice President	M/s Kashi Vishwanath Textile Mill (P) Ltd.	5th KM, Stone, Ramnagar Road, Kashipur-244713, Distt. Udham Singh Nagar
6.	Sh. Jagdish Bhandari	-	-	S/o Late Shri Sultan Singh Bhandari, 94/2, Teg Bahadur Road, Lane 4, Dehradun
7.	Sh. Umesh Chandra Naudiyal	-	-	S/o Late Shri Tota Ram Naudiyal, President, Uttarakhand Pragatishil Kishan Sangathan, 99, Old Nehru Colony, Dehradun
8.	Sh. Lalit Badakoti	Secretary	Progressive Dairy Farmers Association Uttarakhand	Shiv Dairy Farm, Village-Harbanswala, P.O.-Mehuwala, Near Simadwar, Dehradun
9.	Sh. Pramod Singh Tomar	Partner	M/s PSR Innovations LLP	Village-Gopipura, Post-R.T.C. Hempur, Kashipur-244716, Distt. Udham Singh Nagar
10.	Sh. Ashok Bansal	President	M/s Kumaon Garhwal Chamber of Commerce & Industry Uttarakhand	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Udhamsingh Nagar
11.	Sh. Prem Narayan Singh	-	M/s Shree Ambuja Castings (P) Ltd.	Village-Vikrampur, Industrial Estate, Ramraj Road, Bazpur–262401, Distt. Udhamsingh Nagar
12.	Sh. Rajeev Jindal	-	M/s Uttaranchal Ispat (P) Ltd.	Plot No. D-1 to D-8, Pipalia Industrial Area, Gram-Jagannathpur, Bazpur, Distt. Udham Singh Nagar
13.	Sh. Sanjeev Jindal	-	M/s Vishwanath Papers & Boards Ltd.	Kashipur-Jaspur Road, Jaspur-244712, Distt. Udhamsingh Nagar
14.	-	-	M/s Ambashakti Glass India Pvt. Ltd.	Plot No. 41, Sector 3, IIE, Pantnagar, Rudrapur-263153, Distt. Udhamsingh Nagar
15.	Sh. Teeka Singh Saini	Block President	Bhartiya Kisan Union	Office-33, Katoratal, Kashipur, Distt. Udhamsingh Nagar

Sl. No.	Name	Designation	Organization	Address
16.	-	-	M/s KVS Castings Pvt. Ltd.	Works: B-25-29, Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udhamsingh Nagar
17.	Sh. Kuldeep Singh Cheema	-	Bhartiya Kisan Union	Village & Post Office-Dakiya Kalan, Tehsil-Kashipur, Distt. Udhamsingh Nagar
18.	Sh. B.P. Maithani	President	RTI Club	"Roopsadan", 58-Salangaon, Bhagwantpur, Dehradun-248009
19.	-	-	M/s Khatema Fibres Ltd.	UPSIDC Industrial Area, Khatima-262308, Uttarakhand
20.	Sh. Ram Kumar Goel	Sr. Vice President-	Hotel Association of Mussoorie	Hotel Vishnu Palace, Gandhi Chowk, Mussoori-248179, Dehradun
21.	Sh. Ramesh Chauhan	President	Vyapaar Mandal	C/o Ramesh Garments, Distt. Uttarkashi-249193
22.	Sh. Pradeep Bhatt	State President	Uttarakhand District Panchayat Member Organization	Village-Matti, Patti Gazna, Tehsil-Dunda, Distt. Uttarkashi
23.	Sh. Shailendra Singh Bhatuda	President	Hotel Association-Uttarkashi	Office-Hotel Sahaj Villa, Gangotri NH, Gyansu, Distt. Uttarkashi
24.	Sh. Anand Singh Panwar	President	District Advocate Association-Uttarkashi	Distt. Uttarkashi
25.	Sh. J.P. Nautiyal	Advocate & Former President	Advocate Association-Uttarkashi	Distt. Uttarkashi
26.	Sh. Adarsh Jaiswal	Manager (E&I)	M/s Ambuja Cement Ltd.	Village Lakeshwari, P.O.-Sikandarpur Bhainswal, Tehsil-Roorkee, Distt. Haridwar-247661, Uttarakhand
27.	Sh. Jagdish Bhandari	-	-	S/o Late Shri Sultan Singh Bhandari, 94/2, Teg Bahadur Road, Lane 4, Dehradun
28.	Sh. Katar Singh	President	Kisan Club	Village-Sultanpur Sabatwali, P.O. Jhabrera-247665, Tehsil-Roorkee, Haridwar
29.	Sh. Rajendra Chaudhary	Former Vice President	District Congress Committee	Address-423/35, Civil Lines, Roorkee, Distt. Haridwar
30.	Sh. Sanjay Chaudhary	Zonal President (Garhwal)	Bhartiya Kisan Union (Tikait)	Village-Nagla Salaru, Post Off.-Gurukul Narsan, Distt. Haridwar
31.	Sh. Vijay Singh Verma	-	-	Village-Delna, P.O.-Jhabrera-247665, Distt. Haridwar
32.	Sh. Arvind Jain	Member	Tarun Kranti Manch	6-Ramleela Bazaar, Dehradun
33.	Sh. Amar S. Dhunta	General Secretary	RTI Club-Uttarakhand	Off.–827/1, Sirmaur Marg, Kaulagarh Road, Dehradun-248001
34.	Sh. Man Singh	General Manager (Engg.)	M/s Alps Industries Ltd.	Haridwar Unit-II, Plot No. 1 B, Sector-10, Integrated Industrial Estate, SIDCUL, Roshanabad Road, Distt. Haridwar
35.	Sh. Naval Duseja	DGM (Finance & Accounts)	M/s Flex Foods Ltd.	Lal Tappar Industrial Area, P.O. Resham Majri, Haridwar Road, Dehradun-248140

Sl. No.	Name	Designation	Organization	Address
36.	Sh. Pankaj Gupta	President	Industries Association of Uttarakhand	Mohabewala Industrial Area, Dehradun-248110
37.	Sh. Deepak Gupta	Hony. Secretary	Hotel and Restaurant Association of Uttaranchal	Deep Hotel, Camel's Back Road, Kulri, Mussoorie–248179, Dehradun
38.	Sh. Sanjay Agarwal	Secretary	Mussoorie Hotels Association	C/o Hotel Vishnu Palace, Gandhi Chowk, Mussoorie
39.	Sh. Rajesh Madhukant Silodi	-	-	2/17-Unnati Vihar, Nathanpur, P.O.-Nehrugram, Dehradun-248014
40.	Sh. Manish Nawani	-	-	through e-mail (manishnawaniddn@gmail.com)
41.	Sh. Satish Agrawal	Advocate	-	50-Aman Vihar, Niranjanpur, Dehradun
42.	Sh. Inderjeet Malhotra	Veteran Judge	-	House No. 13, Sahastradhara Enclave, Sahastradhara Road, Dehradun-248001
43.	Sh. Sunil Kumar Gupta	Editor	Teesri Aankh ka Tehalka	16, Chakrata Road (Tiptop Gali), Dehradun-248001

8.5 Annexure 5: List of Participants in Public Hearings

List of Participants in Hearing at Champawat on 26.02.2020

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Vijay Verma	President	Nagarpalika Parishad (Champwat)	Talli Haat, Distt. Champawat
2.	Sh. Rohit Bisht	Member	Nagarpalika Parishad (Champwat)	Talli Haat, Distt. Champawat
3.	Sh. Rajendra Gahtori	-	LIC of India	Pithoragarh Road, Distt. Champawat
4.	Sh. Kailash Adhikari, S/o Sh. Bhairav Singh	City President	Bhartiya Janta Party (BJP)	Selakhola, Distt. Champawat
5.	Sh. Nirmal Singh Tadagi	-	-	Baleshwar Ward, Distt. Champawat
6.	Sh. Lalit Mohan Bhatt	-	-	Ward No. 3, Maadli, Distt. Champawat
7.	Sh. Shankar Datt Pandey	Advocate	-	Hotel Shiva Residency, GIC Chowk, Distt. Champawat
8.	Sh. Mohan Singh Adhikari	-	-	Gyali Seran, Distt. Champawat
9.	Sh. Amarnath Sakta	-	-	Bus Stand, Distt. Champawat

List of Participants in Hearing at Rudrapur on 28.02.2020

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Shakeel A. Siddiqui	Sr. General Manager (Finance)	M/s Kashi Vishwanath Textile Mill (P) Ltd.	5th KM, Stone, Ramnagar Road, Kashipur-244713, Distt. Udham Singh Nagar
2.	Sh. Mahip Kumar	-	M/s Reckitt Benckiser India Pvt. Ltd.	B-96, Eldeco Sidcul Industrial Park, Sitarganj-262405, Distt. Udhamsingh Nagar.
3.	Sh. Ashok Bansal	President	M/s Kumaon Garhwal Chamber of Commerce & Industry Uttarakhand	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt. Udhamsingh Nagar.
4.	Sh. Suresh Kumar	President	M/s La Opala RG Ltd.	B-108, Eldeco Sidcul Industrial Park, Sitarganj, Distt. Udhamsingh Nagar
5.	Sh. Sanjay Adlakha	Director	M/s Ambashakti Glass India Pvt. Ltd.	Plot No. 41, Sector 3, Sidcul, IIE, Pantnagar, Rudrapur-263153, Distt. Udhamsingh Nagar
6.	Sh. Udayan Gaur	Manager (Maintenance)	M/s Alpla India Pvt. Ltd.	D-113, Sidcul Industrial Area, Sitarganj-262405, Distt. Udhamsingh Nagar
7.	Sh. Jagdish Pimoli	-	M/s Bhramari Steels Pvt. Ltd.	Works-Kisanpur, Tehsil Kichha, Distt. Udhamsingh Nagar.
8.	Sh. Syed Raffi		M/s HP India Sales Pvt. Ltd.	Plot No. 9-11A & 35-37A, Sector–5, IIE, Sidcul, Pantnagar, Distt. Udhamsingh Nagar.
9.	Sh. Rajeev Gupta	-	M/s Kashi Vishwanath Steels Pvt. Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar
10.	Sh. Girish Chandra	-	M/s Kashi Vishwanath Steels Pvt. Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar
11.	Sh. Teeka Singh Saini	President	Bhartiya Kisan Union	33, Katoratal, Kashipur, Distt. Udhamsingh Nagar
12.	Sh. Prem Singh Sahota	District President	Bhartiya Kisan Union	Kaliyawala, Jaspur, Distt. Udhamsingh Nagar
13.	Sh. Kuldeep Singh Cheema	-	Bhartiya Kisan Union	Village-Dhakiya Kalan, Post Off.-Dakiya No.-I, Tehsil-Kashipur, Distt. Udhamsingh Nagar-244713
14.	Sh. Balkar Singh Fozi	-	-	Village-Raipur Khurd, P.O.-Kashipur, Distt. Udhamsingh Nagar
15.	Sh. Kalyan Singh	-	-	Village-Gardhai, P.O.–Mahuakhera Ganj, Distt. Udhamsingh Nagar
16.	Sh. Sanjeev Tomar	-	M/s Kumaon Garhwal Chamber of Commerce & Industry Uttarakhand	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt. Udhamsingh Nagar.
17.	Sh. Jagdish Singh	-	-	Dharmpur, Chatarpur, Distt. Udhamsingh Nagar.

Sl. No.	Name	Designation	Organization	Address
18.	Sh. Tijendra Singh	-	-	Lok Vihar Colony, Rampur Road, Rudrapur, Distt. Udhamsingh Nagar.
19.	Sh. D.S. Chaudhary	-	M/s Balaji Action Buildwell	Plot No. C-34 & C-34(a) to (d), C-6(a), C-6(b) & C-3, Eldeco Sidcul Industrial Park, Sitarganj-262405, Distt. Udhamsingh Nagar.
20.	Sh. Hari Om	-	-	Plot No. 23, Sector-3, IIE, Sidcul, Pantnagar, Distt. Udhamsingh Nagar.
21.	Sh. Lokesh Ginodia	-	M/s Umashakti Steels (P) Ltd.	Village-Vikrampur, Bannakheda Road, P.O.-Bazpur, Distt. Udham Singh Nagar
22.	Sh. Krishna Avtar Sharma	-	-	Awas Vikas Colony, near Holi Chowk, Rudrapur, Distt. Udham Singh Nagar

List of Participants in Hearing at Uttarkashi on 04.03.2020

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Shailendra Matura	President	Hotel Association	Distt. Uttarkashi
2.	Sh. Rajendra Panwar	-	Hotel Vijayraj	Gangori, Distt. Uttarkashi
3.	Sh. Deepak Kothiyal	-	-	Lane No.-4, Shanti Nagar, Rishikesh
4.	Sh. Prakash Bhandari	-	Hotel K.N.B. Heritage	Bhatwari Road, Distt. Uttarkashi-249193
5.	Sh. Bindesh Kuriyal	-	Hotel Mankameshwer	Netala, Distt. Uttarkashi-249193
6.	Sh. Dhirender Semwal	-	Hotel Bhagirathi Residency	Netala, Distt. Uttarkashi
7.	Sh. Dhanpal Panwar	-	Hotel Ganga Putra	Netala, Distt. Uttarkashi
8.	Sh. Ashish Kuriyal	-	Mahima Resort	Netala, Distt. Uttarkashi
9.	Sh. Rajesh Joshi	-	Holiday Residency	Netala, Distt. Uttarkashi
10.	Sh. Sobendra Singh	-	Megha Guest House	Netala, Distt. Uttarkashi
11.	Sh. Vishal Gumber	-	Hotel Radhika Palace	NH-34, Distt. Uttarkashi- 249193
12.	Sh. Dinesh Kumar Semwal	-	-	Semwal Bhawan, Bhairav Chowk, Barahat, near Parhuram Temple, Distt. Uttarkashi
13.	Sh. Narayan Hari Srivastav	-	-	Biplagali, Distt. Uttarkashi
14.	Sh. Deependra Negi	-	-	Negi T-Stall, Vishwanath Chowk, Distt. Uttarkashi
15.	Sh. Dharambeer Singh	-	-	Lakeshwar, Kot Banglow Road, Distt. Uttarkashi
16.	Sh. Kuldeep Singh Gusain	-	-	"Gusain Bhawan", near Sub Tehsil Office, Joshiyara, Distt. Uttarkashi
17.	Sh. Krishna Kumar	-	-	Ward No. 03, Gyansu, Distt. Uttarkashi
18.	Sh. Deepak Bijalwan	Chairman	Zila Panchayat	Distt. Uttarkashi
19.	Sh. Anand Singh Panwar	Chaiman	Bar Association	Distt. Uttarkashi
20.	Sh. B.S. Matura	Ex. Vice Chairman	Bar Council	Chamber No. 4, District Court, Distt. Uttarkashi
21.	Sh. Praveen Chandra Semwal	General Secretary	Bar Association	Distt. Uttarkashi
22.	Sh. Subhash Singh Kumain	-	Hotel Holy View	Gangotri Road, Distt. Uttarkashi-249193
23.	Sh. Mahabeer Singh	-	Hotel Devansh	Netala, Distt. Uttarkashi
24.	Sh. Praveen Kumar Nautiyal	-	Hotel Omkar	Netala, Distt. Uttarkashi
25.	Sh. Manmohan Thalwal	Mahamantri	Vayapar Mandal	Distt. Uttarkashi

Sl. No.	Name	Designation	Organization	Address
26.	Sh. Ankit Kukreti	-	-	Village & Post Ganeshpur, Distt. Uttarkashi
27.	Sh. Arvind Kukreti	-	-	Village & Post Ganeshpur, Distt. Uttarkashi
28.	Sh. Dinesh Kumar Uppal	-	Hotel Dev Lok	Joshiyara, near LIC office, Distt. Uttarkashi
29.	Sh. Anand Singh Rana	Advocate	-	Near Old Bridge, Joshiyara, Distt. Uttarkashi
30.	Sh. Pratap Singh Rana	-	-	Village-Barethi, Post-Matli, Utsav Palace, Distt. Uttarkashi
31.	Sh. Mayank Semwal	-	-	Village & Post-Gangotri, Distt. Uttarkashi
32.	Sh. Vinod Chamoli	-	-	Vill & Post-Joshiyara, Distt. Uttarkashi
33.	Sh. Raghavarnan	-	-	Pujaar Gaon, Dhanari, Dehradun
34.	Sh. Yashpal Singh Panwar	-	Hotel Ganga Darshan	Maneri, Distt. Uttarkashi-249194
35.	Sh. Gaur Singh Mahar	-	-	Village Heena, P.O.-Netala, Distt. Uttarkashi
36.	Sh. Hardev Rawat	-	-	Village-Saturi, P.O.-Jathol, Block-Mori, Distt. Uttarkashi

List of Participants in Hearing at Dehradun on 06.03.202020

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Vijay Singh Verma	Secretary	Kisan Club	Village-Delna, P.O. Jhabrera, Haridwar-247665, Uttarakhand
2.	Sh. Katar Singh	-	Kisan Club	Village-Sultanpur Sabatwali, P.O. Jhabrera, Haridwar-247667
3.	Sh. Pankaj Gupta	President	M/s Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
4.	Sh. Rajiv Agarwal	Sr. Vice-President	M/s Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun-248 110
5.	Sh. Sanjeev Kumar Sharma	Office Executive	M/s Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
6.	Sh. Jagdish Bhandari	-	-	94/2, Lane No. 4, Teg Bahadur Road, Dehradun
7.	Sh. Arvind Jain	Member	Tarun Kranti Manch (Regd.)	6-Ramleela Bazaar, Dehradun
8.	Sh. Subodh Kumar	President	M/s Progressive dairy Farmers Association	Village-Harbanswala, P.O.-Mehuwala Maafi, near Seemadwar, Dehradun
9.	Sh. Veer Singh	-	-	Village-Mandawali, P.O.-Gurukul Narsan, Thana-Mangalore, Distt. Haridwar-247670
10.	Sh. Shiv Kumar Thapa	-	-	27-A, Sher Bhag Road, Garhi Cantt, Dehradun
11.	Sh. A.G. Barbora	-	-	5/1, Canal Road, Jakhan, Dehradun
12.	Sh. Shanti Prasad Bhatt	-	RTI Club	124-Mitra Lok Colony, Ballupur, Dehradun
13.	Sh. Amar S. Dhunta	General Secretary	RTI Club-Uttarakhand	Off.–827/1, Sirmaur Marg, Kaulagarh Road, Dehradun
14.	Sh. B.D. Joshi	-	RTI Club-Uttarakhand	House No. 165, Lane No. 3, Street-4, Vivekanand Gram, Phase-II, Dehradun-248005
15.	Sh. Yagya Bhushan Sharma	Secretary	RTI Club-Uttarakhand	Off.–827/1, Sirmaur Marg, Kaulagarh Road, Dehradun
16.	Sh. Dheeraj Devradi	-	-	House No.-1, Ganga Vihar, Pithuwala Khurd, Chandrabani, P.O.- Mohabbewala, Dehradun
17.	Sh. Akhilesh Sharma	-	-	85-Gandhi Nagar, Ballupur Road, Dehradun
18.	Sh. Manish Nawani	-	-	L-24, MDDA Colony, Kedarpuram, Dehradun

Sl. No.	Name	Designation	Organization	Address
19.	Sh. Vijay Singh Rawat	-	-	BPO-Banjarawala, Dehradun
20.	Sh. B.K. Aggarwal	President	M/s Tirupati LPG Industries Pvt. Ltd.	Selaqui Industrial Area, Opp. BPCL Petrol Pump, Chakrata Road, Selaqui, Dehradun-248001
21.	Sh. Tushar Madhukar	-	M/s Hindustan National Glass & Industries Ltd.	Virbhadra, Rishikesh, Dehradun
22.	Sh. Viru Bisht	-	-	Mohanpur, Post Off.-Premnagar, Dehradun-248007
23.	Sh. Arvind Malik	-	-	Lane No. 4, Tapowan Road, Near Raipur Block Office, Ladpur, Dehradun-248007
24.	Sh. Naval Kishore Duseja	DGM (Finance & Accounts)	M/s Flex Foods Ltd.	Lal Tappar Industrial Area, P.O. Resham Majri, Haridwar Road, Dehradun-248140
25.	Sh. Kamaldeep Kamboj	-	-	21-Teachers Colony, Govind Garh, Dehradun
26.	Sh. Sunil Gupta	Editor	Teesri Aankh ka Tehalka	16, Chakrata Road (Tiptop Gali), Dehradun-248001
27.	Sh. K.L. Sundriyal	General Secretary	M/s Prantiya Electrical Contractors Association, Uttarakhand	4(4/3), New Road, Near Hotel Relax, (Amrit Kaur Road), Dehradun
28.	Sh. Man Singh	General Manager (Engg.)	M/s Alps Industries Ltd.	Haridwar Unit-II, Plot No. 1 B, Sector-10, Integrated Industrial Estate, SIDCUL, Roshanabad Road, Distt. Haridwar
29.	Sh. Surya Prakash	-	-	153, Dharampur, Dehradun
30.	Sh. Sanjay Chaudhary	-	-	Village-Nagla Salaru, P.O.-Gurukul Narsan, Tehsil-Roorkee, Distt. Haridwar
31.	Sh. Rajendra Chaudhary	Former Vice President	District Congress Committee (Haridwar)	423/35, Civil Lines, Roorkee, Distt. Haridwar
32.	Sh. Adarsh Jaiswal	Manager (F&I)	M/s Ambuja Cement Ltd.	Village Lakeshwari, P.O. Sikandarpur Bhainswal, Tehsil Roorkee, Distt. Haridwar-247661, Uttarakhand

उत्तराखण्ड पावर कॉरपोरेशन लिमिटेड

के टैरिफ आदेश के

अध्याय – 08

दर अनुसूची (रेट शेड्यूल)

का हिन्दी रूपान्तरण

(नोटः— यह रूपान्तरण, मा0 आयोग द्वारा पारित टैरिफ आदेश दिनांक 18.04.2020 के Annexures - 8 का हिन्दी रूपान्तरण है, इस सम्बन्ध में किसी भी प्रकार के निर्वचन/व्याख्या के लिए अंग्रेजी संस्करण ही अन्तिम रूप से मान्य होगा।)

9. संलग्नक

9.1 संलग्नक 1: 01.04.2020 से प्रभावी दर अनुसूची —

ए. आपूर्ति हेतु सामान्य शर्ते—

1. सेवा की प्रकृति

i) 4 kW के भार तक ऑल्टरनेटिंग करेंट 50 Hz सिंगल फेज 230 वोल्ट (अनुमन्य परिवर्तनों के साथ)।

ii) वोल्टेज आपूर्ति की उपलब्धता पर निर्भर करते हुए 4 kW से ऊपर भारों के लिए अल्टरनेटिंग करेंट 50 Hz. 3 फेज, 4 वायर, 400 वोल्ट्स या इससे ऊपर (अनुमन्य परिवर्तनों के साथ)।

2. नये संयोजनों के लिए शर्तें—

i) 75 kW (88 kVA) से अधिक तथा 2550 kW (3000 kVA) तक के नये संयोजनों को आपूर्ति 11 kV या इससे ऊपर पर निर्गत की जायेगी, 2550 kW (3000 kVA) से ऊपर 8500 kW (10000 kVA) तक भार 33 kV या इससे ऊपर पर निर्गत किये जायेंगे तथा 8500 kW (10000 kVA) से ऊपर 132 kV भार पर निर्गत किये जायेंगे।

ii) सभी नये संयोजन, संस्थापन तथा मीटरों के परिचालन पर सी.ई.ए. के विनियमों की पुष्टि करने वाले मीटर के साथ दिये जायेंगे।

iii) 4 kW से ऊपर के सभी नये 3 फेज संयोजन, अधिकतम मांग संकेतक वाले इलैक्ट्रॉनिक ट्राई—वेक्टर मीटर के साथ जारी किये जायेंगे।

iv) सभी नये सिंगल प्वाइंट बल्क संयोजन, 75 kW से अधिक भार पर जारी किये जायेंगे।

v) 5 BHP से अधिक के मोटिव भार रखने वाले उपभोक्ता उपयुक्त रेटिंग के तथा BIS विशिष्टि की पुष्टि करने वाले शंट कैपेसिटर संस्थापित करेंगे।

vi) HT/EHT पर सभी नये संयोजन केवल 3 फेज 4 वायर मीटर्स के साथ जारी किये जायेंगे।

3. आपूर्ति का बिन्दु—

उपभोक्ता को ऊर्जा की आपूर्ति एक एकल बिन्दु पर की जायेगी।

4. त्रुटिपूर्ण मीटर (ADF/IDF), मीटर नहीं पढ़ा/पहुँच नहीं (NA/NR) तथा त्रुटिपूर्ण रीडिंग (RDF) के मामले में बिलिंगः—

NA/NR मामलों में ऊर्जा उपभोग का निर्धारण तथा बिलिंग पिछले एक वर्ष के औसत उपभोग के अनुसार किया जायेगा (विद्युत आपूर्ति संहिता के अनुसार) जो कि वास्तविक रीडिंग लिये जाने पर समायोजन के अधीन होगा। ऐसी अनंतिम रीडिंग एक बार में दो बिलिंग चक्रों से अधिक के लिए जारी नहीं रहेगी। इसके पश्चात् अनुज्ञापी को अनंतिम आधार पर कोई बिल जारी करने का अधिकार नहीं होगा। त्रुटिपूर्ण प्रतीत अवस्था (ADF), त्रुटिपूर्ण मीटर (IDF) तथा त्रुटिपूर्ण रीडिंग (RDF) के मामलों में उपभोक्ताओं की बिलिंग, मीटर के त्रुटिपूर्ण पाये जाने या त्रुटिपूर्ण रिपोर्ट किये जाने की तिथि से ठीक पहले के तीन बिलिंग चक्रों के औसत

उपभोग के आधार पर की जायेगी (विद्युत आपूर्ति संहिता के अनुसार)। ये प्रभार केवल उस अधिकतम तीन महीने की अवधि अथवा द्विमासिक बिलिंग की दशा में दो बिलिंग साईकिल हेतु उद्ग्रहणीय होंगे, जिसमें अनुज्ञापी द्वारा त्रुटिपूर्ण मीटर बदला जाना आवश्यक होगा। इसके पश्चात् अनुज्ञापी को सही किये गये मीटर के बिना बिल जारी करने का अधिकार नहीं है।

त्रुटिपूर्ण मीटर के मामले, यथा IDF तथा ADF तथा त्रुटिपूर्ण रीडिंग मामले यथा RDF की जांच व बदलने का कार्य, लागू विद्युत आपूर्ति संहिता के प्रावधानों के अनुरूप अनुज्ञापी द्वारा किया जायेगा।

5. ग्रामीण/पर्वतीय क्षेत्र के घरेलू मीटर्ड उपभोक्ताओं की बिलिंग, जिनके मीटर नहीं पढ़े जाते हैं–

ग्रामीण/पर्वतीय क्षेत्र के घरेलू उपभोक्ताओं जिनकी मीटर रीडिंग नियमित रूप से नहीं ली जा रही है अथवा समय में देरी अन्तराल से अनियमित रूप से ली जा रही है, ऐसी दोनों स्थितियों में उपभोक्ताओं की अनन्तिम बिलिंग नॉरमेटिव उपभोग के आधार पर निम्नवत् की जायेगी, जिसका वास्तविक मीटर रीडिंग के आधार पर वार्षिक समायोजन किया जायेगाः–

श्रेणी	नॉरमेटिव उपभोग
घरेलू (ग्रामीण–पर्वतीय क्षेत्र)	30 kWh/kW/ माह
घरेलू (ग्रामीण–अन्य क्षेत्र)	50 kWh/kW/ माह

इस उद्देश्य हेतु संविदाकृत भार अगले पूर्णांक तक पूर्णांकित किया जायेगा। अनुज्ञापी द्वारा ऐसे उपभोक्ताओं की मीटर रीडिंग वर्ष में कम से कम एक बार लिया जाना सुनिश्चित किया जायेगा एवं इस आधार पर बिलिंग वार्षिक समायोजित होगी।

6. नये संयोजनों में बिलिंग

नये संयोजन मामलों में जहाँ पिछली रीडिंग उपलब्ध नहीं है, वहां अनंतिम बिलिंग, नीचे दिये अनुसार उपभोग के मानकीय स्तरों पर की जायेगी, जो वास्तविक रीडिंग लिये जाने पर समायोजन के अधीन होगी।

श्रेणी	मानकीय उपभोग
घरेलू–(शहरी)	100 kWh/kW/ माह
घरेलू (ग्रामीण–पर्वतीय क्षेत्र)	30 kWh/kW/ माह
घरेलू (ग्रामीण–अन्य क्षेत्र)	50 kWh/kW/ माह
अघरेलू (शहरी)	150 kWh/kW/ माह
अघरेलू (ग्रामीण)	100 kWh/kW/ माह
निजी टयूब वैल्स	60 kWh/BHP/ माह
उद्योग	
एल.टी. उद्योग	150 kWh/kW/ माह
एच.टी. उद्योग	150 kVAh/kVA/ माह

इस उद्देश्य के लिए, संविदाकृत भार अगले पूर्णांक तक पूर्णांकित किया जायेगा। इस आधार पर की गई बिलिंग केवल अधिकतम 2 बिलिंग चक्रों की अवधि के लिये जारी रहेगी जिस दौरान अनुज्ञापी द्वारा

वास्तविक रीडिंग लिया जाना सुनिश्चित करना होगा। उसके पश्चात् बिना सही मीटर रीडिंग लिये अनुज्ञापी को बिल जारी करने का अधिकार नहीं होगा। अन्य सभी वर्गों में पहला बिल केवल वास्तविक रीडिंग पर ही जारी किया जायेगा।

7. विलंबित भुगतान अधिभार (DPS) (PTW को छोड़कर सभी वर्गों के लिये)

- यदि अनुज्ञापी द्वारा दिये गये बिल का भुगतान नियत तिथि के पश्चात् 15 दिन की रियायत अवधि के भीतर पूर्ण रूप से नहीं किया जाता है तो विद्युत अधिनियम, 2003 की धारा 56 के अनुसार आपूर्ति असंयोजित करने के अनुज्ञापी के अधिकार पर प्रतिकूल प्रभाव डाले बिना पूर्व भुगतान किये जाने तक प्रत्येक उत्तरोत्तर माह या उसके भाग के लिये मूल देय तिथि से, भुगतान न किये गये बिल की मूल राशि पर साधारण ब्याज के रूप में 1.25 प्रतिशत प्रति माह अधिभार लगाया जायेगा। एचटी0 उद्योगों एवं अन्य उपभोक्ताओं, जिनकी बिलिंग ओटोमेटिक मीटर रीडिंग (AMR) प्रणाली के माध्यम से की जा रही है, उनके लिए डी.पी.एस. बिल मूल राशि पर लगाया जायेगा जिस तिथि से देय भुगतान नहीं किया गया है और रियायत अवधि की सुविधा इन्हे अनुमन्य नहीं होगी। अनुज्ञापी, अपने बिल में, यह स्पष्ट रूप से इंगित करेगा कि कुल राशि डी.पी.एस. सहित, नियत तारीख के बाद अलग–अलग तारीखों के लिए देय 15 दिनों में रियायती अवधि, जहाँ भी लागू हो, के लिये अनुमति देने के बाद, इकाई के रूप में माह के अनुसार ले।

8. सोलर वॉटर हीटर छूट

यदि उपभोक्ता सोलर वॉटर हीटिंग प्रणाली संस्थापित करता है तथा उसका उपयोग करता है तो प्रणाली की प्रत्येक 100 लीटर क्षमता के लिए रू0 100/– या उस माह का बिल, दोनों में से जो कम हो, की छूट इस शर्त के अधीन दी जायेगी कि उपभोक्ता अनुज्ञापी को यह शपथपत्र देगा कि उसने वह प्रणाली संस्थापित की है, जिसे अनुज्ञापी समय–समय पर सत्यापित करने के लिये स्वतंत्र होगा। यदि ऐसा कोई दावा झूठा पाया जाता है तो ऐसे उपभोक्ता के विरूद्ध की जा सकने वाली दण्डात्मक विधिक कार्यवाही के अतिरिक्त अनुज्ञापी, 100 प्रतिशत जुर्माने के साथ उपभोक्ता को अनुमन्य कुल छूट की वसूली करेगा तथा अगले 12 माह तक के लिये ऐसी छूट प्राप्ति निषेधित करेगा।

9. प्रीपेड मीटरिंग

आयोग के इस आदेश के द्वारा प्रीपेड मीटरिंग योजना अनुमोदित की गयी है जोकि लागू रहेगी। प्रीपेड मीटरिंग योजना के अन्तर्गत घरेलू श्रेणी (आरटीएस–1 एवं आरटीएस–1ए) हेतु विद्युत प्रभार पर 4% तथा अन्य एलटी उपभोक्ताओं को विद्युत प्रभार पर 3% की छूट, प्रीपेड मीटर के संस्थापन तथा कार्य करने की

तिथि से प्रदानित होगी। किन्तु आरटीएस–9 में अस्थायी आपूर्ति में छूट अनुमन्य नहीं होगी। सोलर वॉटर छूट उपरोक्त दर अनुसूची के अनुरूप इस हेतु आवश्यक शर्तों को पूर्ण करने पर प्रीप्रेड उपभोक्ताओं पर भी लागू होगी।

10. बेस वोल्टेज से उच्च/निम्न वोल्टेज पर आपूर्ति का उपयोग करने के लिये छूट/अधिभार।

i) 75 kW/88 kVA तक संविदाकृत भार वाले उपभोक्ता यदि आपूर्ति 400 वोल्ट्स के ऊपर व 11 kV तक दी जाती है तो बिजली प्रभार की दर पर 5% छूट स्वीकार्य होगी।

ii) 75 kW/88 kVA से ऊपर संविदाकृत भार वाले उपभोक्ताओं के लिये – यदि आपूर्ति 400 वोल्ट्स पर दी जाती है तो उपभोक्ता को बिजली प्रभार की दर पर परिकलित बिल राशि पर 10% का अतिरिक्त प्रभार देना होगा।

iii) 75 kW/88 kVA से ऊपर संविदाकृत भार वाले उपभोक्ता – 33 kV पर आपूर्ति के मामले में, बिजली प्रभार की दर पर 2.5% की छूट प्राप्त करेगें।

iv) 75 kW/88 kVA से ऊपर संविदाकृत भार वाले उपभोक्ता जो 132 kV या अधिक पर आपूर्ति प्राप्त कर रहे हों, बिजली प्रभार की दर पर 7.5% की छूट प्राप्त करेंगे।

v) उपरोक्त सभी वोल्टेज नॉमिनल रेटेड वोल्टेजेज हैं।

vi) जिन उपभोक्ताओं के पास प्रीपेड कनेक्शन है, उन पर छूट या अधिभार लागू नहीं होगी।

11. निम्न पावर फैक्टर अधिभार (घरेलू, PTW तथा kVAh आधारित शुल्क वाले अन्य श्रेणियों पर लागू नहीं)।

i) बिना इलैक्ट्रॉनिक ट्राईवेक्टर मीटर्स वाले उपभोक्ताओं, जिन्होंने उपयुक्त रेटिंग्स तथा विनिर्देशन के शंट कैपेसिटर्स संस्थापित नहीं किये हैं, उनसे वर्तमान विद्युत प्रभारों पर 5% का अधिभार उद्ग्रहीत किया जायेगा।

ii) इलैक्ट्रॉनिक ट्राइवेक्टर मीटर्स वाले उपभोक्ताओं के लिए 0.85 से नीचे तथा 0.80 तक के पावर फैक्टर होने पर वर्तमान विद्युत प्रभारों पर 5% का अधिभार तथा 0.80 से निम्न पावर फैक्टर होने पर वर्तमान विद्युत प्रभारों का 10% के अधिभार उद्ग्रहीत होगा।

iii) जिन उपभोक्ताओं के पास प्रीपेड कनेक्शन है, उन पर अधिभार लागू नहीं होगा।

12. अधिभार/मांग दंड (घरेलू, हिमाच्छादित व PTW श्रेणियों पर लागू नहीं)

ऐसे उपभोक्ताओं के मामले में जहॉ MDI के साथ इलैक्ट्रॉनिक मीटर्स संस्थापित है, यदि किसी माह में अभिलिखित अधिकतम् मांग संविदाकृत भार/मांग से अधिक हो जाती है तो ऐसे अतिरिक्त भार/मांग पर प्रभार लागू स्थिर/मांग प्रभार की सामान्य दर से दोगुना के बराबर –उद्ग्रहीत किया जायेगा। ऐसा अधिक भार दंड

केवल उस माह के लिये लगाया जायेगा, जिसमें अधिकतम् मांग, संविदाकृत भार से अधिक होगी। यद्यपि, जिन उपभोक्ताओं के पास प्रीपेड कनेक्शन है, उन पर अधिभार अतिरिक्त भार जुर्माना लागू नहीं होगा।

उदाहरण :–

i) उन उपभोक्ताओं के लिये, जहाँ संविदाकृत भार/मांग के आधार पर स्थिर प्रभार विनिर्दिष्ट किये गये हैं:

संविदाकृत भार 30 kW, अधिकतम् मांग 43 kW

अति मांग 43–30= 13 kW, स्थिर प्रभारों की दर = रू0 70/kW

संविदाकृत भार के लिये स्थिर प्रभार =30x70= रू0 2100/-

अतिरिक्त भार के लिये स्थिर प्रभार =13 x (2x70) = रू0 1820/-

कुल स्थिर प्रभार =2100+1820= रू0 3920/-

ii) बिल योग्य मांग पर बिल लिये जाने वाले औद्योगिक उपभोक्ताओं के लियेः

संविदाकृत मांग 2500 kVA, अधिकतम मांग 2800 kVA, बिल योग्य मांग=2800 kVA

अतिरिक्त मांग 2800–2500=300 kVA, मांग प्रभारों की दर =रू0 370/kVA

संविदाकृत मांग हेतु मांग प्रभार = 2500 x 370 = रू0 925000/-

अतिरिक्त मांग हेतु मांग प्रभार = 300 x (2x370) = रू0 222000/-

कुल मांग प्रभार = 925000 + 222000 = रू0 1147000/-

13. घरेलू, अघरेलू तथा मिश्रित भार श्रेणियों के लिये एकल बिंदु थोक आपूर्ति।

i) 75 kW से ऊपर कुल भार वाले घरेलू/अघरेलू–भवन/मॉल्स/सहकारी सामूहिक आवास समितियां/कॉलोनियों में आगे वितरण हेतु एकल बिंदु मीटरिंग के साथ एकल बिंदु पर संयोजन प्राप्त करनी हैं। तथापि व्यक्तिगत संयोजन हेतु आवेदन करने में वैधानिक स्वामी/कब्जाधारी के लिये कोई रोक नहीं होगी।

ii) एकल बिन्दु आपूर्ति लेने वाला व्यक्ति, अनुज्ञापी को विद्युत प्रभारों के सभी भुगतान करने के लिए उत्तरदायी होगा। वह दर अनुसूची के अनुसार संबंधित श्रेणी के एकल बिंदु थोक आपूर्ति कि लिए अनुमादित टैरिफ के अनुसार उपभोक्ताओं को बिल देने के लिए अधिकृत है और वितरण अनुज्ञापी, उसी का अनुपालन सुनिश्चित करेगा।

iii) ऐसा व्यक्ति जिसने एकल बिंदु आपूर्ति ली है, वह विद्युत अधिनियम, 2003 की धारा 14 के सातवें परन्तुक के अधीन दी गई एकल बिंदु आपूर्ति वाले परिसर के लिए विद्युत के वितरण की जिम्मेदारी हेतु अनुज्ञापी, अभिकर्ता भी समझा जायेगा तथा वितरण अनुज्ञापी, ऐसे क्षेत्र के भीतर उसके अधीन अधिनियम तथा नियमों व विनियमों के सभी उपबन्धों के अनुपालन हेतु उत्तरदायी होगा।

iv) 'घरेलू' के अन्तर्गत एकल बिंदु थोक आपूर्ति केवल आवासीय कॉलोनियों/आवासीय बहुमंजिला इमारतों की आम सुविधाओं (जैसे लिफ्टों, सार्वजनिक प्रकाश और जल पम्पिंग प्रणाली के रूप में) सहित आवासीय कालोनियों/बहुमंजिला इमारतों पर लागू होगी। यदि इस प्रकार के आवासीय कालोनियों/आवासीय बहुमंजिला इमारतों में कुछ अन्य दुकानें अथवा अन्य कोई व्यावसायिक प्रतिष्ठान हों, ऐसी स्थिति में उन पर मिश्रित लोड श्रेणी की दर अनुसूची में प्रदान की गई शर्तों के अधीन टैरिफ लागू होगा।

v) अघरेलू के अन्तर्गत एकल बिंदु थोक आपूर्ति केवल शॉपिंग कॉम्पलैक्स/मल्टीप्लैक्स/मॉल्स् के लिए लागू होगी।

14. पूर्णांकन :

i) संविदाकृत भार/मांग केवल पूर्ण संख्या में अभिव्यक्त की जायेगी तथा खण्ड भार/मांग की अगली पूर्ण संख्या तक पूर्णांकित किया जायेगा।

उदाहरणः

0.15 kW का संविदाकृत/स्वीकृत भार, शुल्क उद्देश्य हेतु 1 kW माना जायेगा। इसी प्रकार 15.25 kW/kVA का संविदाकृत/स्वीकृत भार 16 kW/kVA लिया जायेगा।

ii) सभी बिल निकटतम् रूपये तक पूर्णांकित किये जायेंगे।

15. अन्य प्रभार :

प्रभार की दर में दिये गये प्रभारों तथा विविध प्रभारों की अनुसूची में सम्मिलित प्रभारों के सिवाय अन्य कोई प्रभार आयोग की स्वीकृति के बिना उपभोक्ताओं से वसूल नहीं किये जायेंगे।

बी. शुल्क दरें

आर.टी.एस.–1 : घरेलू

1. अनुप्रयोज्यता :

विद्युत की आपूर्ति हेतु यह अनुसूची निम्न पर लागू होगी :

i) रोशनी, पंखा, पावर व अन्य घरेलू उद्देश्यों के लिए आवासीय परिसर (यूपीसीएल, पिटकुल एवं यूजेवीएन लि0 के कर्मचारियों एवं पैंशनर् के आवास सहित) सामूहिक सुविधाओं सहित (जैसे लिफ्ट, सार्वजनिक प्रकाश तथा वाटर पम्पिंग सेट)।

ii) 75 **kW** के ऊपर के एकल बिन्दु थोक आपूर्ति के लिए आवासीय कॉलोनियॉ, बहुमंजिले भवन जहाँ ऊर्जा का प्रयोग केवल ऐसे घरेलू उद्देश्य (जैसे लिफ्ट, सार्वजनिक प्रकाश तथा वॉटर पम्पिग सेट) के लिये होता हो, सम्मिलित है।

iii) धार्मिक स्थलों जैसे मन्दिर, मस्जिद, गुरूद्वारा, चर्च इत्यादि (जहाँ मात्र पूजा/इबादत की जगह अकेले में/अलग से हो, उन पूजा स्थलों/इबादतगाहों के लिए जहाँ धर्मशाला, सामुदायिक केन्द्र, शयनगृह इत्यादि सम्बद्ध हो, वहाँ यह अनुसूची लागू नहीं होगी।)

iv) गौशाला/गौसदन एवं डेयरी फार्म, जिनका लोड 4 kW तक है तथा उपभोग 600 kWh प्रतिमाह तक है।

v) दीनदयाल उपाध्याय गृह आवास (होम–स्टे) विकास योजना नियमावली, 2018 के अन्तर्गत पंजीकृत होम–स्टे

(यह दर सूची उन उपभोक्ताओं पर भी लागू होगी, जिनके पास 2 kW तक का संविदाकृत भार है, साथ ही 200 kWh/माह तक का उपभोग है तथा जो उपरोक्त परिसर का कुछ भाग उपरोक्त अघरेलू उद्देश्यों के लिये कर रहे हैं। तथापि यदि ऐसे परिसरों के लिए संविदाकृत भार 2 kW से अधिक व उपभोग 200 kWh/माह से अधिक है तो जब तक कि भार को अलग–अलग नहीं किया जाता तथा पृथक रूप से मीटर नहीं लिया जाता, दोनों में से कोई एक, उपभोग की गई समस्त ऊर्जा उपयुक्त दर अनुसूची के अधीन प्रभारित की जायेगी।)

2. प्रभार की दर :

विवरण	स्थिर प्रभार*	विद्युत मूल्य
1. घरेलू		
1.1) बी0पी0एल0/लाईफ लाइन उपभोक्ता		
गरीबी रेखा से नीचे व कुटीर ज्योति जिनका 1 kW तक भार तथा 60 यूनिट प्रति माह उपभोग हो	रू0 18/संयोजन/ माह	रू0 1.61/ kWh
1.2) अन्य घरेलू उपभोक्ता		
100 यूनिट्स/माह तक उपभोग हेतु	रू0 60/माह	रू0 2.80/kWh
101–200 यूनिट्स/माह उपभोग हेतु	रू0 95/माह	रू0 3.75/kWh
201–400 यूनिट्स/माह उपभोग हेतु	रू0 165/माह	रू0 5.15/kWh
400 यूनिट्स/माह से ऊपर	रू0 260/माह	रू0 5.90/kWh
2) एकल बिन्दु थोक आपूर्ति	रू0 85/kW/माह	रू0 4.85/kWh

**अन्य घरेलू उपभोक्ताओं के मामले में स्थिर प्रभार दरें माह में कुल खपत के बराबर ली जायेगी।*

आर टी एस 1 ए : हिमाच्छादित

1. प्रयोज्यता

विद्युत की आपूर्ति हेतु यह अनुसूची निम्न पर लागू होगी :

(i) हिमाच्छादित क्षेत्रों के घरेलू व अघरेलू उपभोक्ता।

(ii) यह अनुसूची, संबंधित जिलाधिकारी द्वारा हिमाच्छादित/हिम रेखा के रूप में अधिसूचित क्षेत्रों पर लागू होती है।

2. आपूर्ति प्रभार की दर

विवरण	स्थिर प्रभार	विद्युत मूल्य
1) घरेलू	रू0 18/संयोजन/माह	रू0 1.61/ kWh
2) अघरेलू 1 kW तक		रू0 1.61/ kWh
3) अघरेलू 1 kW से 4 kW तक		रू0 2.36/ kWh
4) अघरेलू 4 kW से ऊपर	रू0 30/संयोजन/माह	रू0 3.51/ kWh

3. इस अनुसूची की अन्य सभी शर्ते वही होंगी जो कि आरटीएस–1 में है।

आर.टी.एस.–2 : अघरेलू

1- प्रयोज्यता :

विद्युत की आपूर्ति हेतु यह अनुसूची निम्न पर लागू होगी :

1.1 (i) सरकारी/नगर पालिका चिकित्सालय।
(ii) सरकारी/सरकारी सहायता प्राप्त शैक्षिक संस्थान।
(iii) आयकर अधिनियम, 1961 के अधीन पंजीकृत ऐसी धर्मार्थ संस्थाएं जिनकी आय को इस अधिनियम के अधीन कर की छूट प्राप्त हो।

1.2 छोटे अघरेलू उपभोक्ता जिनका अनुबन्धित भार 4 kW तक तथा उपभोग 50 यूनिट/माह तक हो।

1.3 75 kW के ऊपर एकल बिंदु थोक आपूर्ति के अन्य अघरेलू/वाणिज्यिक उपयोगकर्ता जिसमें शॉपिंग कॉम्पलेक्स/मल्टीप्लैक्स/मॉल्स जिसमें सामूहिक सुविधाओं सहित (जैसे लिफ्ट, सार्वजनिक प्रकाश तथा वाटर पम्पिग सेट) सम्मिलित हो हेतु सम्मिलित हैं।

1.4 स्वतन्त्र विज्ञापन बोर्डों/होर्डिंग्स– सभी व्यवसायिक (सड़क किनारे/छत पर या इमारतों के किनारे इत्यादि) पर अकेले खड़े स्वतन्त्र विज्ञापन होर्डिंग्स जो कि निजी विज्ञापन साईन पोस्ट/साईन बोर्ड्स/साईन ग्लोज्/फ्लैक्स है, जिनको पृथक मीटर से स्वतन्त्र मीटरिंग की जा रही है।

2- प्रभार की दर

कम सं0	विवरण	स्थिर प्रभार	विद्युत मूल्य
1.1	(i) सरकारी/नगर पालिका चिकित्सालय (ii) सरकारी/सरकार सहायता प्राप्त शैक्षिक संस्थान (iii) आयकर अधिनियम 1961 के अधीन पंजीकृत ऐसी धमार्थ संस्थाएं जिनकी आय पर इस अधिनियम के अधीन कर की छूट प्राप्त है।		
	(ए) 25 kW तक	रू0 70/kW	रू0 4.60/kWh
	(बी) 25 kW से ऊपर	रू0 80/kVA	रू0 4.35/kVAh
1.2	अन्य अघरेलू उपभोक्ताओं		
	(ए) छोटे अघरेलू उपभोक्ता जिनका अनुबन्धित भार 4 kW तथा उपभोग 50 यूनिट प्रति माह हो।*	रू0 70/ kW	रू0 4.70/kWh
	(बी) 25 kW तक उपरोक्त 1.2 (ए) में शामिल नहीं	रू0 85/ kW	रू0 5.75/kWh
	(सी) 25 kW से ऊपर	रू0 85/ kVA	रू0 5.60/kVAh
1.3	एकल बिंदु थोक आपूर्ति**	रू0 85/ kVA	रू0 5.65/kVAh
1.4	स्वतन्त्र विज्ञापन होर्डिंग्स्	रू0 100/ kW	रू0 6.25/kWh

** यदि खपत 50 यूनिट/माह से अधिक है तो पूर्ण खपत पर विद्युत प्रभार उप–श्रेणी 1.2 (बी) के अनुसार लिया जायेगा।*
*** शापिंग कॉम्प्लेक्स/मल्टीप्लैक्स/मॉल्स के लिये 75 kW से ऊपर*

3- अन्य शर्तें

3.1 टी ओ डी मीटर्स, केवल मीटर रीडिंग उपकरण (MRI) द्वारा पढे जायेंगे। पूर्ण विश्लेषण के प्रयोजन हेतु फेजर डायग्राम, टेंपर रिपोर्ट, पूर्ण भार सर्वेक्षण रिपोर्ट इत्यादि पूर्ण डंप के साथ डाउन लोड किये जायेंगे।

3.2 25 kW से ऊपर के सभी उपभोक्ताओं हेतु आवश्यक रूप से ToD मीटर होंगे।

3.3 शून्य भार या अत्यन्त कम भार पर कोई मीटर नहीं पढ़ा जायेगा। अनुज्ञापी उपयुक्त वाह्य भार रखेगा तथा उक्त भार पर एम. आर. आई. लेने के लिए जहाँ आवश्यक हो उसे उपयोग करेगा।

3.4 एम आर आई सारांश रिपोर्ट की प्रति बिल के साथ उपलब्ध कराई जायेगी। भार सर्वेक्षण रिपोर्ट सहित पूर्ण एम. आर. आई. रिपोर्ट, मांग करने पर तथा रू0 15/– के बिल का भुगतान करने पर प्रदान की जायेगी।

आर टी एस–3: गवर्नमेंट पब्लिक युटिलिटिज्

1. अनुप्रयोज्यता

विद्युत की आपूर्ति हेतु यह अनुसूची निम्न पर लागू होगी :

(i) स्ट्रीट लाइटिंग सिस्टम, ट्रैफिक सिग्नल, सार्वजनिक उद्यानों की लाईटिंग इत्यादि सम्मिलित है। हरिजन बस्तियों तथा गांवों का पथ प्रकाश भी इस अनुसूची में सम्मिलित है।

(ii) राज्य नलकूपों, विश्व बैंक नलकूपों, पम्प नहरें तथा लिफ्ट सिंचाई योजना, लघु दल नहर इत्यादि।

(iii) किसी सरकारी विभाग द्वारा स्वामित्व तथा संचालित सिंचाई योजना।

(iv) जल संस्थान, जल निगम अथवा अन्य कोई स्थानीय ईकाई तथा प्लास्टिक रिसाईकिलिंग प्लॉट जिसके द्वारा पब्लिक वॉटर वर्क्स, सीवर ट्रीटमेंट प्लॉटों तथा सीवेज़ पंपिंग स्टेशन का संचालन किया गया हो।

2. प्रभार की दर

श्रेणी	स्थिर प्रभार*	विद्युत मूल्य
शहरी (मीटर्ड)	रू0 70 / kVA/माह	रू0 5.40 / kVAh
ग्रामीण (मीटर्ड)	रू0 60 / kVA/माह	रू0 5.40 / kVAh

** शहरी एवं ग्रामीण क्षेत्रों में विद्युत आपूर्ति का अन्तर केवल उपरोक्त 1(i) तथा 1(iv) के अनुसार लागू होगा।*

3. पब्लिक लैम्पस हेतु अनुरक्षण प्रभार

उपरोक्त ''प्रभार की दर'' के अतिरिक्त रू0 10/–प्रति लाईट प्वाइंट प्रति माह केवल मजदूरी शामिल करते हुए स्ट्रीट लाईट के परिचालन एवं अनुरक्षण हेतु प्रभारित किया जायेगा। सभी अपेक्षित सामग्री की आपूर्ति स्थानीय निकायों द्वारा की जायेगी। तथापि स्थानीय निकायों के पास पब्लिक लैम्पस का परिचालन व अनुरक्षण स्वयं करने का विकल्प होगा तथा ऐसी स्थिति में कोई अनुरक्षण प्रभार नहीं लिया जायेगा।

4. पथ प्रकाश प्रणाली के लिए उपबंध

यदि, उपरोक्तानुसार अनुरक्षण प्रभार प्रभारित किया जा रहा है तो लैम्पस के बदलने या इसके नवीनीकरण में लगने वाले श्रमिक अनुज्ञापी द्वारा उपलब्ध कराये जायेंगे किंतु सभी सामग्री स्थानीय निकायों द्वारा उपलब्ध करायी जायेगी। यदि स्थानीय निकाय के अनुरोध पर अनुज्ञापी सामग्री उपलब्ध करवाता है तो इसकी लागत स्थानीय निकाय द्वारा प्रभार्य होगी।

ऐसे क्षेत्रों में जहाँ अनुज्ञापी के वितरण मेन्स नहीं बिछाये गये हैं वहाँ स्ट्रीट लाईट मेन्स (उप स्टेशनों की लागत, यदि कोई है, सहित) के विस्तार की लागत का भुगतान स्थानीय निकाय द्वारा किया जायेगा।

आर टी एस – 4: निजी नलकूप /पम्पिंग सेट्स

1. अनुप्रयोज्यता:

यह अनुसूची विद्युत की आपूर्ति हेतु उन सभी उपभोक्ताओं पर लागू होती है जो सिंचाई के उद्देश्य से तथा चारा काटने की मशीन, धान की भूसी निकालने की मशीन, गन्ना पिराई की मशीन व अनाज के दाने अलग करने की मशीन तक सीमित प्रासंगिक कृषि कार्यो के लिए निजी नल कूपों/पम्पिंग सेट्स हेतु आपूर्ति प्राप्त कर रहे हैं। हालांकि प्रासंगिक कृषि के उद्देश्य के अंतर्गत सिंचाई हेतु लिये गये संयोजन पर आरटीएस–4 के अन्तर्गत टैरिफ लागू होगा।

2. प्रभार की दर:

श्रेणी	स्थिर प्रभार रू0/बीएचपी/माह	विद्युत मूल्य रू0/kWh
आरटीएस– 4 : PTW (मीटर्ड)	शून्य	2.03

3. बिलों का भुगतान तथा विलंबित भुगतान हेतु अधिभार:

इस श्रेणी के लिये बिल वर्ष में दो बार अर्थात दिसंबर अंत (जून से नवम्बर की अवधि के लिये) तथा जून अंत (दिसम्बर से मई की अवधि के लिये) जारी किये जायेगें। दिसम्बर में जारी किये गये बिलों का भुगतान उपभोक्ता द्वारा एक साथ या अगले वर्ष 30 अप्रैल तक (अधिकतम चार भागों में किया जाय) किया जा सकता है जिसके लिये कोई डी.पी.एस. उद्ग्रहीत नहीं किया जायेगा। इसी प्रकार जून में जारी किये गये बिलों का भुगतान बिना डी.पी.एस. के 31 अक्टूबर तक किया जा सकता है। यदि उपभोक्ता विनिर्दिष्ट तिथियों तक भुगतान करने में असफल रहता है तो मूल बकाया राशि पर उस अवधि (माह या उसके भाग) के लिए 1.25% प्रतिमाह की दर से आपूर्ति की सामान्य शर्तों की क्रम सं0 7 के अनुसार अधिभार लगेगा।

आर टी एस – 4 (ए) : कृषि सम्बद्ध सेवायें

1. अनुप्रयोज्यताः

यह अनुसूची विद्युत की आपूर्ति हेतु उन पर लागू होती है जो पौधा नर्सरी, पॉलीहाऊस एवं अन्य यूनिट्स में उगाये फूलों/सब्जियों तथा फलों, तथा मशरूम की खेती सहित, जहां भण्डारण एवं संरक्षण के अतिरिक्त किसी प्रकार के उत्पादों का प्रसंस्करण न की जाती हो।

2. प्रभार की दर

श्रेणी	स्थिर प्रभार रू0/बीएचपी/माह	विद्युत मूल्य रू0/KWh
आरटीएस–4 (ए) : कृषि संबद्ध सेवायें	शून्य	2.25

आर टी एस 5: एल टी तथा एच टी उद्योग

1. **अनुप्रयोज्यता**

विद्युत की आपूर्ति हेतु यह अनुसूची निम्न पर लागू होगी :

(i) औद्योगिक तथा/या प्रसंस्करण या कृषि औद्योगिक उद्देश्यों, बिजली करघा व साथ ही आर्क/इन्डक्शन फर्नेसेज, रोलिंग/रि–रोलिंग मिल्स, लघु स्टील संयंत्रों के लिये तथा किसी अन्य दर अनुसूची के अधीन सम्मिलित न किये गये उपभोक्ता।

(ii) सब्जी, फल, फूलों व मशरूम की खेती, प्रसंस्करण, भंडारण व पैकेजिंग के साथ कृषि तथा जो आरटीएस–4 (ए) में आच्छादित न होते हों, इस प्रकार की इकाइयाँ भी इस दर अनुसूची में सम्मिलित होगी।

2. **आपूर्ति की विशिष्ट शर्तें**

(i) सभी संयोजन, उपयुक्त रेटिंग तथा बी.आई.एस. विनिर्देशनों के एम सी बी (मिनियेचर सर्किट ब्रेकर) या सर्किट ब्रेकर/स्विच गियर के साथ संयोजित किये जायेंगे।

(ii) इंडक्शन व आर्क फर्नेसेज को आपूर्ति यह सुनिश्चित कर लेने के पश्चात ही उपलब्ध कराई जायेगी कि स्वीकृत भार फर्नेसेज के टनेज की भार आवश्यकताओं के तद्नुसार है। 1 टन का न्यूनतम् भार किसी भी दशा में 400 kVA से कम नहीं होगा तथा सभी भार इसी आधार पर अवधारित किये जायेंगे। इस मानक से नीचे के किसी भार के लिये कोई आपूर्ति नहीं की जायेगी।

(iii) स्टील यूनिट्स को आपूर्ति, उप–स्टेशन के छोर पर चेक मीटर के साथ केवल एक डेडिकेटेड इंडिविजुवल फीडर के माध्यम से 33 kV या इससे ऊपर की वोल्टेज पर उपलब्ध करवाई जायेगी। चेक मीटर तथा उपभोक्ता मीटर (रों) की रीडिंग्स के मध्य 3% से अधिक के अंतर की अनुज्ञापी द्वारा तुरंत जाँच करवाई जायेगी तथा सुधारात्मक कार्यवाही की जायेगी।

(iv) 1000 kVA से अधिक के भार के साथ सभी नये संयोजनों को आपूर्ति, उपरोक्त के (iii) उपबंधों के साथ केवल स्वतंत्र पोषकों पर निर्गत की जानी चाहिये।

विवरण	विद्युत प्रभार		स्थिर/मांग प्रभार प्रतिमाह
1. 75 kW (100 BHP) तक संविदाकृत भार वाले एलटी उद्योग			
1.1 संविदाकृत भार 25 kW तक	रू0 4.60/kWh		संविदाकृत भार का रू0 155/kW
1.2 संविदाकृत भार 25 kW से अधिक	रू0 4.25/kVAh		संविदाकृत भार का रू0 150/kVA
2. 88 kVA /75 kW (100 BHP) से ऊपर संविदाकृत भार वाले एचटी उद्योग	लोड फैक्टर#	रू0/kVAh	
2.1 संविदाकृत भार 1000 kVA तक	40% तक	4.20	* बिल योग्य मांग का रू0 310/kVA
	40% से ऊपर	4.60	
2.2 संविदाकृत भार 1000 kVA से ऊपर	40% तक	4.20	* बिल योग्य मांग का रू0 370/kVA
	40% से ऊपर	4.60	

******बिल योग्य मांग, वास्तविक अधिकतम मांग या संविदाकृत भार का 80%, जो अधिक हो, होगी।*

#शुल्क उद्देश्यों के लिये लोड फैक्टर (%) निम्न रूप में समझा जायेगाः–

$$= \frac{\text{बिलिंग अवधि में उपभोग (उन्मुक्त अभिगमन से प्राप्त विद्युत रहित) x 100}}{\text{अधिकतम् मांग या संविदाकृत मांग, दोनों में से जो कम हो x बिलिंग अवधि में घंटों की संख्या}}$$

यद्यपि जहाँ उपभोक्ता द्वारा उन्मुक्त अभिगमन अवधि के दौरान लिए जाने पर अधिकतम मांग उस माह में बढ़ जाने की दशा में, लोड फैक्टर के आंकलन के उद्देश्य हेतु अधिकतम मांग वही होगा जिस अवधि में उन्मुक्त अभिगमन न किया गया हो।

3. समयानुसार शुल्क (ToD) (टैरिफ)

(i) 25 kW से अधिक भार के एल टी उद्योग तथा एच टी उद्योग के लिये ऊपर दिये गये ऊर्जा प्रभार की दरें ToD छूट/अधिभार के अधीन होंगी।

(ii) ToD मीटर्स, केवल मीटर रीडिंग इन्स्ट्रूमेंट (MRI) द्वारा पढ़े जायेंगे। पूर्ण विश्लेषण हेतु फेजर डायग्राम, टेंपर रिर्पोट्र्स, पूर्ण भार सर्वे रिपोट्र्स इत्यादि के पूर्ण डंप डाउन–लोड किये जायेंगे तथा बिल, प्रभार ToD दर के अनुसार जारी किये जायेंगे।

(iii) कोई भी मीटर शून्य भार पर या अत्यन्त निम्न भार पर नहीं पढ़े जायेंगे। अनुज्ञापी उपयुक्त वाह्य भार रखेगा तथा उक्त भार पर MRI लेने के लिये जहां आवश्यक हो वहाँ इसे लागू करेगा।

(iv) MRI सारांश की प्रति, बिल के साथ उपलब्ध करवाई जायेगी। भार सर्वे रिपोर्ट सहित पूर्ण एम आर आई रिपोर्ट मांग पर तथा रू0 15/– के भुगतान पर उपलब्ध करवाई जायेगी।

(v) ToD भार निम्नानुसार होगा :

सीजन/दिन का समय	सुबह पीक आवर्स	सामान्य घण्टे	सांय पीक आवर्स	ऑफ पीक आवर्स
शीतकाल 01.10 से 31.03	0600–0900 बजे	0900–1800 बजे	1800–2200 बजे	2200–0600 बजे
ग्रीष्मकाल 01.04 से 30.09	–	0700–1800 बजे	1800–2300 बजे	2300–0700 बजे

विद्युत मूल्य की ToD दर निम्नानुसार होंगी :

एल टी उद्योग के लिये

अवधि में प्रभार की दर		
सामान्य घण्टे	**पीक आवर्स**	**ऑफ पीक आवर्स**
रू0 4.25 / kVAh	रू0 6.38 / kVAh	रू0 3.61 / kVAh

एच टी उद्योग के लिये

लोड फैक्टर*	अवधि में प्रभार की दर		
	सामान्य घण्टे	**पीक आवर्स**	**ऑफ पीक आवर्स**
40% तक	रू0 4.20 / kVAh	रू0 6.90 / kVAh	रू0 3.57 / kVAh
40% से ऊपर	रू0 4.60 / kVAh	रू0 6.90 / kVAh	रू0 3.91 / kVAh

**लोड फैक्टर ऊपर खण्ड 2 में परिभाषित किया गया है।*

4. मौसमी उद्योग

जहाँ किसी उपभोक्ता के पास 18 kW (25 BHP) से अधिक का भार हो तथा ToD मीटर हो तथा वह वर्ष में कुछ निश्चित मौसमों में या सीमित अवधि के दौरान, घोषित मौसमी उद्योग के लिये ऊर्जा की आपूर्ति का उपयोग करता है तो जिस अवधि में संयंत्र बंद रहता है उन महीनों (जिसे ऑफ सीजन कहा जायेगा) के लिए उद्ग्रहण निम्नानुसार किया जायेगा :

(i) 'सीजन' अवधि के लिये शुल्क वही होगा जो इस अनुसूची में दिये अनुसार ''प्रभार की दर'' हैं।

(ii) जहाँ ''ऑफ सीजन'' अवधि में वास्तविक मांग संविदाकृत भार के 30% से अधिक नहीं है, वहाँ ''ऑफ सीजन'' अवधि हेतु विद्युत मूल्य वहीं होगें जो ऊपर अनुसूची की दर में दी गई ''सीजन'' अवधि के लिये हैं। तथापि ''ऑफ सीजन'' संविदाकृत मांग घटाकर 30% कर दी जायेगी।

(iii) ऑफ सीजन अवधि में अधिकतम अनुज्ञेय मांग, संविदाकृत मांग का 30% होगी तथा एक उपभोक्ता जिनकी वास्तविक मांग ऑफ सीजन के किसी माह में संविदाकृत मांग के 30% से अधिक होती है तो उन्हें उस सीजन की अवधि में घटी हुई संविदाकृत मांग का लाभ नहीं दिया जायेगा। इसके अतिरिक्त मांग प्रभार के 10% की दर से पूर्ण ''ऑफ सीजन'' अवधि हेतु अधिभार देय होगा।

मौसमी उद्योगों के लिये निबंधन एवं शर्तें–

(i) परिचालन की अवधि एक वित्त वर्ष में 9 माह से अधिक नहीं होनी चाहिये।

(ii) जहाँ वित्त वर्ष में परिचालन की अवधि 4 माह से अधिक है वहाँ ऐसे उद्योग को कम से कम चार क्रमिक माह तक परिचालित होना चाहिये।

(iii) एक बार अधिसूचित सीजनल अवधि को वर्ष की अवधि तक घटाया नहीं जा सकता। मौसमी भार के साथ अन्य भार धारित कम्पोजिट ईकाईयों पर 'ऑफ सीजन' शुल्क लागू नहीं होगा।

(iv) चीनी, बर्फ, राईस मिल, जड़ीकृत आहार (फ्रोजन फूड) तथा चाय के अतिरिक्त उद्योग आयोग के पूर्व अनुमोदन के पश्चात् ही अनुज्ञापी द्वारा अधिसूचित किये जायेंगे।

5. फैक्टरी लाईटिंग

इस अनुसूची के अधीन आपूर्ति की गई विद्युतीय ऊर्जा का उपयोग फैक्ट्री परिसर में लाईट्स, पंखे, कूलर्स, इत्यादि के लिये भी किया जायेगा जिसमें कार्यालयों, मुख्य फैक्ट्री भवन, स्टोर्स, टाईम कीपर के कार्यालय, कैन्टीन, स्टाफ क्लब, पुस्तकालय, शिशु सदन, औषधालय स्टाफ कल्याण केन्द्रों, अहातों में फैक्ट्री लाइटिंग के लिये उपभोग की गई सभी ऊर्जा सम्मिलित होगी।

6. निरंतर व अनिरंतर आपूर्ति :

(i) निरन्तर प्रक्रिया उद्योग के साथ अनिरन्तर प्रक्रिया उद्योग के उपभोक्ता जो कि स्वंत्रत फीडर या औद्योगिक फीडर से जुड़े हों, निरन्तर आपूर्ति हेतु विकल्प चुन सकते है। एक औद्योगिक फीडर से जुड़े हुए सभी उद्योगों के निरन्तर आपूर्ति विकल्प चुनने के उपरान्त ही निरन्तर आपूर्ति प्रदान की जायेगी तथा यदि उनमें से कोई औद्योगिक उपभोक्ता निरन्तर आपूर्ति नहीं चाहता हो तो ऐसे फीडर पर सभी उपभोक्ता निरन्तर आपूर्ति का लाभ उठाने के लिए अर्ह नहीं होंगे। इस तरह की निरन्तर प्रक्रिया वाले औद्योगिक उपभोक्ता जो निरन्तर आपूर्ति चुनते है, उन्हें पूर्व में सूचित/अनूसूचित बिजली कटौती से तथा समय–समय पर आयोग द्वारा अनुमोदित बिजली उपभोग में प्रतिबंध की अवधि की सीमित घंटे के दौरान ऊर्जा के आपातकालीन रूप से ठप्प होने या बंद की स्थिति को छोड़कर अन्य समय लोड शैडिंग से छूट प्राप्त होगी।

(ii) वे उपभोक्ता जो कि पूर्व में निरन्तर आपूर्ति विकल्प चुने हुए है, को निरन्तर आपूर्ति चुनने हेतु पुनः आवेदन करने की आवश्यकता नहीं है। ऐसे उपभोक्ताओं को दिनांक 01.04.2020 से 31.03.2021 तक ऊपर उल्लेखित विद्युत प्रभार का 7.5 % अतिरिक्त विद्युत प्रभार देय होगा। यूपीसीएल से यदि कोई विवाद किसी फीडर में हो तो उस फीडर के उपभोक्ताओं को 30 अप्रैल, 2020 तक नये तौर से निरन्तर आपूर्ति हेतु आवेदन करना होगा।

(iii) विद्युत निरन्तर आपूर्ति (जो उपरोक्तानुसार नये तौर पर आवेदन कर रहे हों सहित) के लिए वर्तमान उपभोक्ता जो नये आवेदक वर्ष में कभी भी आवेदन दे सकते हैं। हालांकि, ऐसे आवेदकों के लिये निरन्तर आपूर्ति सरचार्ज 1 मई, 2020 से 31 मार्च, 2021 तक के लिये लागू रहेगा। यूपीसीएल, आवेदन की तिथि से 7 दिनों के दौरान, निरन्तर आपूर्ति की शर्तों की पूर्ति के लिए सुविधा प्रदान करेगा।

(iv) स्वतंत्र फीडर से आपूर्ति का प्रबन्धन कर लिये जाने की स्थिति में यूपीसीएल द्वारा निरन्तर आपूर्ति की सुविधा, स्वतंत्र फीडर द्वारा कार्य पूर्ण कर लिये जाने की तिथि से, निरन्तर आपूर्ति की शर्तों की पूर्ति के साथ, प्रदान करेगा, इस तरह के नये उपभोक्ता स्वतंत्र फीडर के सक्रियण की दिनांक 31.03.2021 तक वास्तविक अवधि हेतु निरंतर आपूर्ति विकल्प हेतु लागू होगा।

(v) निरंतर आपूर्ति का चयन करने के लिए नए उपभोक्ता (नये संयोजन) के मामले में 7.5% अतिरिक्त विद्युत शुल्क के रूप में सतत् सप्लाई सरचार्ज 31 मार्च 2021 तक निरंतर आपूर्ति की वास्तविक अवधि के बावजूद नए कनेक्शन की दिनांक से लागू होगा।

(vi) वर्तमान में निरन्तर आपूर्ति का लाभ उठाने वाले उपभोक्ता, जो पूर्व में दी गयी निरन्तर आपूर्ति को बंद करना चाहते हो, को दिनांक 30 अप्रैल, 2020 से पूर्व लिखित में सूचित करना होगा और उन्हें निरन्तर आपूर्ति अधिभार के साथ इस आदेश में उल्लेखित टैरिफ दरों के आधार पर 30 अप्रैल, 2020 तक की अवधि का भुगतान करना होगा। इसके अलावा, इस सम्बन्ध में यदि कोई उपभोक्ता द्वारा एक विशेष फीडर पर निरन्तर आपूर्ति का लाभ उठाने के विकल्प छोड़ दिए जाने पर, अन्य उपभोक्ताओं को दी जा रही निरन्तर आपूर्ति के साथ, उक्त फीडर से जुडे अन्य निरन्तर आपूर्ति के उपभोक्ता प्रभावित होते है तो यूपीसीएल सभी प्रभावित उपभोक्ताओं को पूर्व में लिखित रूप से सूचित करेगा।

(vii) ओपन एक्सेस के माध्यम से औद्योगिक उपभोक्ताओं द्वारा बिजली खरीदे जाने पर निरन्तर आपूर्ति सर–चार्ज लागू नहीं होगा।

(viii) यूपीसीएल गैर निरन्तर आपूर्ति फीडर के लिए एक निरन्तर आपूर्ति फीडर की स्थिति को परिवर्तित नहीं करेगा।

(ix) यूपीसीएल/पिटकुल शीर्ष प्राथमिकता के आधार पर यह सुनिश्चित करेंगे कि वृद्धि, रख–रखाव और मरम्मत कार्य विशेषतया सब–स्टेशनों में जहाँ सर्किट ब्रेकर्स, अन्य उपकरणों इत्यादि जोकि जीर्ण–शीर्ण दशा में है, उनसे निरन्तर आपूर्ति फीडर में रूकावट न हो।

(x) यूपीसीएल/पिटकुल निरन्तर आपूर्ति के उपभोक्ताओं को दिये जा रहे फीडर की आवधिक निवारण अनुरक्षण करेगा। लाईसेंसी निरन्तर आपूर्ति के उपभोक्ताओं को पूर्व में आवधिक निवारण अनुरक्षण कार्यक्रम के बारे में सलाह उपरान्त योजना बनाकर सूचित करेगा, जिससे ऐसे उपभोक्ता अपने कार्य कर सकें।

(xi) अनुज्ञापी को विद्युत मूल्य तथा उस पर निरंतर ऊर्जा अधिभार बिल पृथक रूप से दिखाना चाहिये।

7. एचटी उद्योगों हेतु मांग प्रभार

यदि किसी एचटी उद्योग उपभोक्ता, जो माह में एक दिन के 18 घण्टे की न्यूनतम औसतन आपूर्ति प्राप्त नहीं करते हैं, उनके लिए मांग प्रभार स्वीकृत मॉग प्रभार का 80% अनुप्रयोज्य होगा।

आर टी एस 6ः मिश्रित भार

1. अनुप्रयोज्यताः

यह अनुसूची 75 kW से अधिक के एकल बिंदु थोक आपूर्ति संयोजन पर लागू होती है जहाँ आपूर्ति प्रमुखतः घरेलू उद्देश्यों (60% से अधिक घरेलू भार) के लिये तथा साथ ही अन्य अघरेलू उद्देश्यों के लिये प्रधान रूप से उपयोग में लाई जाती हैं। यह अनुसूची MES को आपूर्ति पर भी लागू होती है।

2. प्रभार की दरः

इस श्रेणी के उपभोक्ताओं पर निम्नलिखित दरें लागू होगी :

स्थिर प्रभार	विद्युत मूल्य
रू0 90 / kW / माह	रू0 5.30 / kWh

3. अन्य शर्तें :

उपरोक्त के अतिरिक्त शुल्क की अन्य शर्ते वही होंगी, जो आर.टी.एस.–1 के उपभोक्ताओं के लिये हैं। तथापि, अधिभार दंड, आपूर्ति की सामान्य शर्तों के खण्ड 12 के अनुसार लागू होगा।

आर टी एस 7: रेलवे ट्रैक्शन

1. अनुप्रयोज्यता

यह अनुसूची ट्रैक्शन उद्देश्यों के लिये ऊर्जा उपयोग करने वाली रेलवे पर लागू होती है।

2. प्रभार की दरः

इस श्रेणी के लिये निम्नलिखित विद्युत मूल्य, मांग प्रभार लागू होंगे।

मांग प्रभार	विद्युत मूल्य
रू0/kVA/माह	रू0/kVAh
250/–	रू0 4.65

3. अन्य शर्ते :

उपरोक्त के अतिरिक्त, शुल्क की अन्य शर्ते वही रहेंगी जो निरंतर आपूर्ति हेतु ToD टैरिफ एवं अधिभार की प्रयोज्यता को छोड़कर आरटीएस–5 के अधीन सामान्य एच टी उद्योगों के लिये हैं।

आर टी एस 8: इलैक्ट्रिक वाहन चार्जिंग स्टेशन

4. अनुप्रयोज्यता

यह अनुसूची वाणिज्यिक प्रयोग के उद्देश्य के लिए इलैक्ट्रिक वाहन चार्जिंग स्टेशन के लिये ऊर्जा उपयोग करने पर लागू होगी।

5. प्रभार की दरः

इस श्रेणी के लिये निम्नलिखित विद्युत मूल्य, मांग प्रभार लागू होंगे।

मांग प्रभार	**विद्युत मूल्य**
रू0 / kVA / माह	रू0 / kVAh
—	रू0 5.50

आरटीएस 9 : अस्थायी आपूर्ति

(ए) अस्थायी आपूर्ति

1. अनुप्रयोज्यता

(i) यह अनुसूची लाईट, पंखे, और विद्युत भार हेतु सभी उद्देश्यों जिसमें प्रदीपन/जन–संबोधन/समारोह तथा त्यौहारों/उत्सवों/अस्थाई दुकानों अधिकतम 03 माह तक की अस्थायी आपूर्ति पर लागू होगी।

(ii) यह अनुसूची, सरकारी विभागों सहित सभी उपभोक्ताओं द्वारा सिविल कार्यों सहित निर्माण प्रयोजनों के लिये ली गई ऊर्जा के लिये भी लागू होगी। किसी कार्य/परियोजना के लिये निर्माण प्रयोजन हेतु ऊर्जा कार्य/परियोजना के पूर्ण होने तक निर्माण कार्य के लिए प्रथम संयोजन लेने की तिथि से मानी जायेगी।

तथापि भवन के निर्माण, मरम्मत या नवीनीकरण के लिये उपभोक्ता के स्वयं के परिसर हेतु स्वीकृत एक स्थायी संयोजन द्वारा विद्युत के प्रयोग को विद्युत का अनाधिकृत उपयोग नहीं माना जायेगा, जब तक कि निर्माण किये जा रहे वर्तमान भवन/अनुलग्नक का आशयित प्रयोजन/उपयोग, संयोजक की स्वीकृत श्रेणी में वही अनुज्ञेय है।

2. प्रभार की दर

प्रभार की दर, उपयुक्त अनुसूची में प्रभार की तद्नुरूप दर के अतिरिक्त 25% होगी। चार (4) माह की अधिकतम् अवधि के लिये दिये गये 15 BHP तक के ईख दलन यंत्र हेतु अस्थायी आपूर्ति के लिये उपयुक्त दर अनुसूची आरटीएस–5 होगी।

9.2 संलग्नक 2: विविध प्रभारों की अनुसूची

क्र0 सं0	प्रभारों का स्वभाव	यूनिट	दर (रू0)
1.	**मीटरों की जॉच व परीक्षण**		
	ए. सिंगल फेज मीटर्स	प्रति मीटर	50.00
	बी. तीन फेज मीटर्स	प्रति मीटर	75.00
	सी. रिकार्डिंग टाईप वॉट–आवर मीटर्स	प्रति मीटर	170.00
	डी. अधिकतम मांग संकेतक/एलटी सीटी संचालित मोटर्स	प्रति मीटर	350.00
	ई. ट्राई वेक्टर मीटर्स/एचटी मीटर्स सीटी/पीटी के साथ	प्रति मीटर	1000.00
	एफ. एमीटर्स एंड वोल्ट मीटर्स	प्रति मीटर	65.00
	जी. स्पेशल मीटर्स	प्रति मीटर	335.00
	एच. मीटरों का प्राथमिक परीक्षण	प्रति मीटर	शून्य
2.	प्राथमिक परीक्षण से अन्य बाद का परीक्षण तथा संस्थापन	प्रति मीटर	80.00
3.	**किसी भी कारण से (किसी संयोजन के काटने या पुर्नसंयोजन के लिये) आपूर्ति का संयोजन काटना या पुनसंयोजन का प्रभार 50% होगा।**		
	ए. 100 BHP/75 kW से ऊपर भार वाले उपभोक्ता	प्रति जॉब	600.00
	बी. 100 BHP/75 kW तक के अघरेलू तथा औद्योगिक उपभोक्ता	प्रति जॉब	400.00
	सी. उपभोक्ताओं की अन्य सभी श्रेणियाँ	प्रति जॉब	200.00
4.	**मीटरों का बदलना**		
	ए. मीटर का संस्थापन तथा अस्थायी संयोजन की अवस्था में इसका हटाया जाना।	प्रति जॉब	75.00
	बी. उपभोक्ता के निवेदन पर मीटर बोर्ड की स्थिति में परिवर्तन	प्रति जॉब	100.00
5.	उपभोक्ता के निवेदन पर कैपेसिटर्स की जॉच (प्रारंभिक जॉच के अतिरिक्त):		
	ए. 400V/230 V पर	प्रति जॉब	150.00
	बी. 11 kV तथा इससे ऊपर पर	प्रति जॉब	300.00