GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)



Tariff Order

Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

For

Torrent Power Limited – Distribution Ahmedabad

Case No. 2179 of 2023

31st March, 2023

6th Floor, GIFT ONE, Road 5C, GIFT CITY
Gandhinagar-382335 (Gujarat), INDIA

Phone: +91-79-23602000 Fax: +91-79-23602054/55 E-mail: gerc@gercin.org : Website www.gercin.org



GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC) GANDHINAGAR

Tariff Order

Truing up for FY 2021-22 and

Determination of Tariff for FY 2023-24

For

Torrent Power Limited – Distribution Ahmedabad

Case No. 2179 of 2023

31st March, 2023



CONTENTS

1.	Back	ground and Brief History	1
	1.1.	Background	1
	1.2.	Torrent Power Limited (TPL)	3
	1.3.	Commission's Tariff Order for FY 2022-23	3
	1.4.	Background of the present petition	3
	1.5.	Registration of the Current Petition and the Public Hearing Process	4
	1.6.	Approach of this Order	6
	1.7.	Contents of this Order	7
2.	Sumr	nary of TPL-D (Ahmedabad)'s Petition	8
	2.1.	Introduction	8
	2.2.	Actuals for FY 2021-22 submitted by TPL-D (A)	8
	2.3.	Sharing of gains and losses for FY 2021-22	8
	2.4.	Summary of ARR, Revenue at Existing Tariff and Proposed Revenue Gap for FY 2021-22	9
	2.5.	ARR, Revenue at Existing Tariff and Revenue Gap / Surplus for FY 2023-24	10
	2.6.	TPL-D (A)'s Prayer to the Commission	10
3.	Brief	outline of Objections raised, Response from TPL-D (A) and the Commission's view	.12
	3.1.	Public response to the petition	12
	3.2.	Issue-wise submissions, replies and the Commission's view	12
	3.2.1.	Details of power purchase cost of SUGEN and UNOSUGEN	12
	3.2.2.	Purchase of Power from higher rates to compensate power from SUGEN & UNOSUGEN	13
	3.2.3.	Power Purchase for FY 2023-24	13
	3.2.4.	Telecom Industry may be placed under Industrial category	14
	3.2.5.	High Expenses	15
	3.2.6.	Use of Smart meters	15
	3.2.7.	Old Plant & Machinery	16
	3.2.8.	Power from Wind and Solar Power Plants	16
	3.2.9.	Electricity Theft	17
	3.2.10.	Audit by CAG	17
	3.2.11.	Wheeling and Retail Supply	18



	3.2.12.	Separate Slab for Armed Forces	18
	3.2.13.	TPL-Generation Cost for FY 2021-22	19
	3.2.14.	RPO Compliance	19
	3.2.15.	Sales forecast for FY 2023-24	20
	3.2.16.	Regulatory Charges	21
	3.2.17.	Green Tariff	21
	3.2.18.	Additional Slab of above 400 units	22
	3.2.19.	Separate fixed charges for consumers installing solar roof top plants	22
	3.2.20.	Recovery of Past Period Dues	23
	3.2.21.	Revision in Base Price with FPPCA	24
	3.2.22.	Electricity Duty	24
4.	Truin	g up for FY 2021-22	.26
	4.1.	Introduction	26
	4.2.	Energy Sales to the Consumers	26
	4.3.	Distribution Losses	28
	4.4.	Energy Requirement	28
	4.5.	Energy Availability	29
	4.6.	Power Purchase Cost	33
	4.6.1.	Sharing of Gains/Losses due to reduction in Distribution Losses	37
	4.7.	Fixed Charges	38
	4.7.1.	Operation and Maintenance (O&M) Expenses	38
	4.7.2.	Capital Expenditure, Capitalization and Sources of Funding	41
	4.7.3.	Depreciation	53
	4.7.4.	Interest and Finance Charges	54
	Petition	er's submission:	54
	4.7.5.	Return on Equity	58
	4.7.6.	Income Tax	60
	4.7.7.	Bad Debts Written Off	63
	4.7.8.	Contingency Reserve	64
	4.7.9.	Interest on Working Capital	65
	4.7.10.	Non-Tariff Income	66
	4.7.11.	Revenue from Sale of Power	68
	4.7.12.	Gains/Losses under truing up for FY 2021-22	70



	4.7.13.	Sharing of Gains / Losses for FY 2021-22	71
5.		egate Revenue Requirement (ARR) for FY 2023-24 and determination of tariff for FY	
2(
	5.1.	Energy sales	
	5.1.1.	Historical data of energy sales	
	5.1.2.	Overall approach to sales projections	76
	5.1.3.	Projected energy sales	76
	5.1.3.1	Residential (RGP)	76
	5.1.3.2	Non RGP Category	77
	5.1.3.3	Low Tension Maximum Demand (LTMD)	77
	5.1.3.4	HT Pumping Stations	78
	5.1.3.5	HT Maximum Demand (HTMD)	78
	5.1.3.6	HT – Metro	79
	5.1.3.7	HT – Electric Vehicles	80
	5.1.3.8	Others Category	80
	5.1.3.9	Summary of Energy sales	80
	5.1.4.	Distribution losses	81
	5.1.5.	Energy Requirement	82
	5.1.6.	Energy Availability	83
	5.1.7.	Power Purchase Cost	86
	5.2.	Fixed Charges	90
	5.2.1.	Operation and Maintenance (O&M) Expenses	90
	5.2.2.	Capital Expenditure, Capitalization and Sources of Funding	91
	5.2.3.	Depreciation	101
	5.2.4.	Interest and Finance Charges	101
	5.2.5.	Interest on Security Deposit	103
	5.2.6.	Return on Equity	103
	5.2.7.	Income Tax	104
	5.2.8.	Bad Debts Written Off	105
	5.2.9.	Contingency Reserve	105
	5.2.10.	Interest on Working Capital	105
	5.2.11.	Non-Tariff Income	107
	5.2.12.	Aggregate Revenue Requirement (ARR) for FY 2023-24	107
	5.2.13.	Revenue from Sale of Power	109



	5.2.14.	Trued up net Revenue Gap/(Surplus) of FY 2021-22	109
	5.2.15.	Revenue Gap/(Surplus) for FY 2023-24	110
6.	Com	oliance of Directives	.112
	6.1.	EARLIER DIRECTIVES	112
7.	Fuel	and Power Purchase Price Adjustment	.114
	7.1.	Fuel Price and Power Purchase Price Adjustment	114
	7.2.	Formula	114
	7.2.1.	Base Price of Power Purchase (PPCB)	115
8.	Whe	eling Charges and Cross Subsidy Surcharge	.117
	8.1.	Wheeling Charges	117
	8.1.1.	Determination of Wheeling Charges	119
	8.2.	Cross Subsidy Surcharge	122
	8.3.	Additional Surcharge	125
9.	Tariff	Philosophy and Tariff Proposals	.126
	9.1.	Introduction	126
	9.2.	Proposal of TPL for increase in Retail Tariffs for TPL-D (A) for FY 2023-24	126
	9.3.	Commission's Ruling on Retail Tariffs for TPL-D (A) for FY 2023-24	127
	9.4.	Green Power Tariff	127
	COMMI	SSION'S ORDER	129



LIST OF TABLES

Table 1.1: List of Newspapers in which Public Notice was published by the Petitioner	4
Table 1.2: List of Newspapers in which Public Notice for Hearing was published by the Commission	n.5
Table 1.3Venue & Schedule of Public Hearing	5
Table 1.4: List of Stakeholders	5
Table 2.1: Actuals Claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	8
Table 2.2: Summary of Sharing of Gains and Losses for TPL-D (A) for FY 2021-22 (Rs. Crore)	8
Table 2.3: True-up ARR claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	9
Table 2.4: Revenue Gap/ (Surplus) for TPL-D (A) for FY 2021-22 (Rs. Crore)	9
Table 2.5: Revenue Gap/ (Surplus) of TPL-D (A) for FY 2023-24 (Rs. Crore)	. 10
Table 2.6: Cumulative Revenue (Gap)/Surplus for determination of tariff of TPL-D (A) for FY 2023-2	24
(Rs. Crore)	. 10
Table 4.1: Energy Sales for FY 2021-22 for TPL-D (A) area (MUs)	. 26
Table 4.2: Distribution Losses for FY 2021-22 as submitted by TPL-D (A)	. 28
Table 4.3: Energy Requirement for FY 2021-22 for TPL-D(A) (MUs)	. 29
Table 4.4: Energy Availability (Net) for FY 2021-22 for Ahmedabad & Surat (MUs)	. 30
Table 4.5: RPPO submitted by TPL for FY 2021-22	
Table 4.6: RPO Targets approved by the Commission for TPL-D	. 32
Table 4.7: Approved Energy Availability (Net) for FY 2021-22 for TPL-D (A) and TPL-D (S) (MUs)	. 33
Table 4.8: Power Purchase Cost projected by TPL for Ahmedabad and Surat area for FY 2021-22 (R	₹s.
Crore)	. 33
Table 4.9: Approved Power Purchase Cost for TPL-D (A) and TPL-D (S) for FY 2021-22 (Rs. Crore)	. 36
Table 4.10: Gain due to reduction in energy requirement for FY 2021-22 claimed by TPL-D (A)	. 37
Table 4.11: Approved Gains due to reduction in Distribution Losses for FY 2021-22	
Table 4.12: O&M expenses claimed by TPL- Ahmedabad for FY 2021-22	. 39
Table 4.13: O&M Expenses approved by the Commission for FY 2021-22 (Rs. Crore)	
Table 4.14: Capital expenditure claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	
Table 4.15 Approved CAPEX and Capitalization for FY 2021-22 (Rs. Crore)	. 46
Table 4.16: Capital works in progress (CWIP) approved in true up for FY 2021-22 for TPL-D (A) (Rs.	
Crore)	
Table 4.17: Break up of capitalised assets for FY 2021-22 (Rs. Crore)	
Table 4.18: Funding of capitalization approved for TPL-D (A) for FY 2021-22 (Rs. Crore)	
Table 4.19: Depreciation claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	
Table 4.20: Interest Expense claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	
Table 4.21: Interest Expenses approved in truing up for FY 2021-22 (Rs. Crore)	
Table 4.22: Interest Expenses and Gains/ (Losses) approved by the Commission for FY 2021-22 (Rs	.
Crore)	
Table 4.23 Interest on Security Deposit claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	
Table 4.24 Interest on Security Deposit and Gains/Losses approved for FY 2021-22 (Rs. Crore)	
Table 4.25: Return on Equity claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	
Table 4.26: Return on Equity approved by the Commission for FY 2021-22 (Rs. Crore)	
Table 4.27: Return on Equity and Gains/Losses approved in truing up for FY 2021-22 (Rs. Crore)	
Table 4.28: Income tax claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	. 61



Table 4.29: Utility wise breakup of Tax credit received for FY 2016-17	62
Table 4.30: Income Tax and Gains/Losses approved in the truing up for FY 2021-22 (Rs. Crore)	63
Table 4.31: Bad Debts Written-off claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	63
Table 4.32: Bad Debts Written off and Gains/Losses approved for truing up for FY 2021-22 (Rs.	Crore)
	64
Table 4.33: Gains/ (Losses) for contingency reserves approved for FY 2021-22 (Rs. Cr)	64
Table 4.34: Interest on Working Capital claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	65
Table 4.35: Interest on Working Capital approved by the Commission for FY 2021-22 (Rs. Crore)	
Table 4.36:Non-Tariff Income claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)	
Table 4.37: Non-Tariff Income and Gains/(Losses) approved for truing up for FY 2021-22 (Rs. Cro	
Table 4.38:Controllable & Uncontrollable variations for FY 2021-22 claimed by the Petitioner (R	
Crore)	
Table 4.39: ARR approved in respect of TPL-D (A) in the truing up for FY 2021-22 (Rs. Crore)	
Table 4.40: Approved Trued up ARR incl. Gains/(Losses) for TPL-D (A) for FY 2021-22 (Rs. Crore)	
Table 4.41: Break-up of Revenue towards recovery of earlier years approved Gap/(Surplus) for	
(A) claimed for FY 2021-22	
Table 4.42: Approved Revenue Gap for TPL-D (A) for FY 2021-22 (Rs. Crore)	
Table 5.1: Historical data of energy sales in TPL – D (Ahmedabad) supply area (MUs)	
Table 5.2: Approved Energy sales for TPL – D (Ahmedabad) area for FY 2023-24 (MUs)	
Table 5.3: Computation of distribution losses for FY 2023-24	
Table 5.4: Energy requirement projected by TPL-D for FY 2023-24 (MU)	
Table 5.5: Energy requirement approved by the Commission for TPL-D for FY 2023-24 (MU)	
Table 5.6: Energy availability as projected by Petitioner for FY 2023-24 (MU)	
Table 5.7: Energy availability approved by the Commission for TPL-D supply area for FY 2023-24	
(MUs)	
Table 5.8: Power Purchase Cost Projected by TPL-D for FY 2023-24 (Rs. Crore)	
Table 5.9: Summary of approved power procurement sources with cost/kWh for TPL-D for FY 2	
24	
Table 5.10: Approved Power Purchase Cost for TPL-D (Ahmedabad) (Rs. Crore)	
Table 5.11: O&M Expenses approved by Commission for FY 2023-24	
Table 5.12: Capital expenditure claimed by TPL-D (A) for FY 2023-24 (Rs. Crore)	
Table 5.13 Capitalisation Projected for FY 2023-24 (Rs. Crore)	
Table 5.14: Projected CAPEX, capitalisation by TPL-D (A) for FY 2023-24 (Rs. Crore)	
Table 5.15: Gross Fixed Assets approved for FY 2023-24 for TPL-D (A) (Rs. Crore)	
Table 5.16: Depreciation approved for FY 2023-24 (Rs. Crore)	
Table 5.17: Interest on loans projected by TPL-D (A) for FY 2023-24 (Rs. Crore)	
Table 5.18: Interest on loans approved for FY 2023-24 (Rs. Crore)	
Table 5.19: Return on Equity approved by the Commission for FY 2023-24 (Rs. Crore)	
Table 5.20: Interest on Working Capital projected by TPL-D (A) for FY 2023-24 (Rs. Crore)	
Table 5.21: Interest on Working Capital approved for FY 2023-24 (Rs. Crore)	
Table 5.22: ARR projected by the Petitioner for FY 2023-24 (Rs. Crore)	
Table 5.23: ARR approved in respect of TPL-D (A) for FY 2023-24 (Rs. Crore)	
Table 5.24: Revenue Gap / (Surplus) approved for FY 2023-24 (Rs. Crore)	
	±±0



Table 7.1: Approved power purchase cost per unit for FY 2023-24	115
Table 8.1: Allocation Matrix for segregation of Wheeling and Retail Supply submitted by the	
Petitioner for FY 2023-24	117
Table 8.2: Segregation of ARR into Wires and Supply Business for FY 2023-24 (Rs. Crore)	118
Table 8.3: Approved Segregation of ARR into Wires and Supply Business for FY 2023-24 (Rs. Crore))
	118
Table 8.4: Wheeling Charges proposed by TPL-D (A) for FY 2023-24	120
Table 8.5: Proposed Wheeling Losses for TPL-D (A) for FY 2023-24	121
Table 8.6: Wheeling Charges for TPL-D (A) for FY 2023-24	122
Table 8.7: Wheeling Losses approved for Open Access consumers for TPL-D (A)	122
Table 8.8: Proposed Cross Subsidy Surcharge payable for Open Access Consumers in TPL-D (A) for	FΥ
2023-24	123
Table 8.9: Approved Cross Subsidy Surcharge payable for open access consumers in TPL-D (A) for F	FΥ
2023-24	124



ABBREVIATIONS

ARR Agregate Revenue Requirement ANR Automated Meter Readers APTEL Appellate Tribunal for Electricity CAGR Compounded Annual Growth Rate CAPEX Capital Expenditure CEA Central Electricity Authority CERC Central Electricity Authority CERC Central Electricity Regulatory Commission Control period The period from FY 2016-17 to FY 2020-21 DGVCL Dakshin Gujarat Vij Company Limited DISCOM Distribution Company DPC Delayed Payment Charges DSEZ Dahej SEZ DSL Dahej SEZ DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNIL Gujarat Urja Vikias Nigam Limited HP Horse Power HT High Tension Maximum Demand HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt Ampere kVAh Kilo Volt Ampere kVAh Kilo Volt Ampere HVAN Milion Units (Million kWh) HVAN Million Volt Ampere	A&G	Administration and General Expenses	
AMR Aprellate Tribunal for Electricity CAGR Compounded Annual Growth Rate CAPEX Capital Expenditure CEA Central Electricity Authority CERC Central Electricity Regulatory Commission Control period Distribution Company DPC Delayed Payment Charges DSEZ Dahej SEZ DSL Dahej SEZ DAHej Dahe		·	
APTEL Appellate Tribunal for Electricity CAGR Compounded Annual Growth Rate CAPEX Capital Expenditure CEA Central Electricity Authority CERC Central Electricity Authority CERC Central Electricity Regulatory Commission Control period The period from FY 2016-17 to FY 2020-21 DGVCL Dakshin Gujarat Vij Company Limited DISCOM Distribution Company DPC Delayed Payment Charges DSEZ Dahej SEZ DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kVA Kilo Volt Ampere kVAh Kilo Volt Ampere kVAh Kilo Volt Ampere kVAh Kilo Volt Ampere kVAh Kilo Wolt Ampere kVAh Kilo Wolt Ampere kVAh Milo Units (Million kWh) MVA Million Volt Ampere OFC Optical Fibre Communication		99 9	
CAGR CAPEX Capital Expenditure CEA Central Electricity Authority CERC Central Electricity Regulatory Commission Control period The period from FY 2016-17 to FY 2020-21 DGVCL Dakshin Gujarat Vij Company Limited DISCOM Distribution Company DPC Delayed Payment Charges DSEZ Dahej SEZ DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHIT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt Ampere kVAh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Millor Operations and Maintenance OFC Optical Fibre Communication			
CAPEX Capital Expenditure CEA Central Electricity Authority CERC Central Electricity Authority CERC Central Electricity Regulatory Commission Control period The period from FY 2016-17 to FY 2020-21 DGVCL Dakshin Gujarat Vij Company Limited DISCOM Distribution Company DPC Delayed Payment Charges DSEZ Dahej SEZ DSL Dahej SEZ DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt Ampere kVAh Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MTM Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere NTPC National Thermal Power Corporation OSM Operations and Maintenance OFC Optical Fibre Communication		,	
CEAC Central Electricity Authority CERC Central Electricity Regulatory Commission Control period The period from FY 2016-17 to FY 2020-21 DGVCL Dakshin Gujarat Vij Company Limited DISCOM Distribution Company DPC Delayed Payment Charges DSSZ Dahej SEZ DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Margial Cost of Funds Based Lending Rate MMUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation OSM Operations and Maintenance OFC Optical Fibre Communication			
CERC Central Electricity Regulatory Commission Control period The period from FY 2016-17 to FY 2020-21 DGVCL Dakshin Gujarat Vij Company Limited DISCOM Distribution Company DPC Delayed Payment Charges DSEZ Dahej SEZ DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHIT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt Ampere kVAh Kilo Volt Ampere kVAh Kilo Volt Ampere HVAH Kilo Watt Hour LT Low Tension Power LTMD Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MWA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation OSAM Operations and Maintenance OFC Optical Fibre Communication			
Control period The period from FY 2016-17 to FY 2020-21 DGVCL Dakshin Gujarat Vij Company Limited DISCOM Distribution Company DPC Delayed Payment Charges DSEZ Dahej SEZ DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Vear GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kWA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation OS&M Operations and Maintenance OFC Optical Fibre Communication			
DGVCL Dakshin Gujarat Vij Company Limited DISCOM Distribution Company DPC Delayed Payment Charges DSEZ Dahej SEZ DSSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange KV Kilo Volt KVA Kilo Volt Ampere KVAh Kilo Volt Ampere Hour KWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
DISCOM Distribution Company DPC Delayed Payment Charges DSEZ Dahej SEZ DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
DPC Delayed Payment Charges DSEZ Dahej SEZ DSL Dahej SEZ DSL Dahej SEZ DSL Dahej SEZ DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt Ampere kVAh Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
DSEZ DSL Dahej SEZ DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Voltage EPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
DSL Dahej SEZ Ltd. EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication		, ,	
EA Electricity Act, 2003 EHT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
EHT Extra High Tension EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
EHV Extra High Voltage FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Volt Ampere Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Tiber Maintenance OFC Optical Fibre Communication			
FPPPA Fuel and Power Purchase Price Adjustment FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Voth Ampere Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
FY Financial Year GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
GERC Gujarat Electricity Regulatory Commission GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication		•	
GETCO Gujarat Energy Transmission Corporation Limited GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
GFA Gross Fixed Assets GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication		, , , ,	
GIDC Gujarat Industrial Development Corporation GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication		, ,	
GUVNL Gujarat Urja Vikas Nigam Limited HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
HP Horse Power HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
HT High Tension HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication			
HTMD High Tension Maximum Demand IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	HP		
IEX Indian Energy Exchange kV Kilo Volt kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	HT		
kV Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	HTMD		
kVA Kilo Volt Ampere kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication		ŭ.	
kVAh Kilo Volt Ampere Hour kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	kV	Kilo Volt	
kWh Kilo Watt Hour LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	kVA	Kilo Volt Ampere	
LT Low Tension Power LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	kVAh	Kilo Volt Ampere Hour	
LTMD Low Tension Maximum Demand MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	kWh	Kilo Watt Hour	
MCLR Marginal Cost of Funds Based Lending Rate MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	LT		
MSW Municipal Solid Waste MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	LTMD	Low Tension Maximum Demand	
MTR Mid-term Review MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	MCLR	Marginal Cost of Funds Based Lending Rate	
MUS Million Units (Million kWh) MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	MSW	Municipal Solid Waste	
MVA Million Volt Ampere MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	MTR	Mid-term Review	
MW Mega Watt MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	MUs	Million Units (Million kWh)	
MYT Multi-Year Tariff NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	MVA	Million Volt Ampere	
NRGP Non Residential General Purpose NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	MW	Mega Watt	
NTPC National Thermal Power Corporation O&M Operations and Maintenance OFC Optical Fibre Communication	MYT	Multi-Year Tariff	
O&M Operations and Maintenance OFC Optical Fibre Communication	NRGP	Non Residential General Purpose	
OFC Optical Fibre Communication	NTPC	National Thermal Power Corporation	
'	O&M	Operations and Maintenance	
ONGC Oil & Natural Gas Corporation	OFC	Optical Fibre Communication	
	ONGC	Oil & Natural Gas Corporation	



PF	Power Factor	
PPA	Power Purchase Agreement	
PPC	Power Purchase Cost	
RBI	Reserve Bank of India	
REC	Renewable Energy Certificate	
R&M	Repairs and Maintenance	
RPO	Renewable Purchase Obligation	
SBI	State Bank of India	
SEZ	Special Economic Zone	
SLC	Service Line Charges	
TEL	Torrent Energy Limited	
TPL	Torrent Power Limited	
TPL-D (A)	Torrent Power Limited – Distribution, Ahmedabad	



Before the Gujarat Electricity Regulatory Commission at Gandhinagar

Case No. 2179 of 2023

Date of Order: 31/03/2023

CORAM

Anil Mukim, Chairman

Mehul M. Gandhi, Member

S. R. Pandey, Member

1. Background and Brief History

1.1. Background

Torrent Power Limited (hereinafter referred to as TPL or the Petitioner) has filed the present Petition under Section 62 of the Electricity Act'2003, read in conjunction with Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations'2016, vide Suo-Motu Order No. 2140 of 2022 dated 20th October, 2022 for determination of tariff for its generating business at Ahmedabad for FY 2022-23.

Gujarat Electricity Regulatory Commission (hereinafter referred as "the Commission") notified the GERC (Multi-Year Tariff) Regulations, 2016 on 29th March, 2016 which is applicable for determination of tariff in all cases covered under the Regulations from



1st April, 2016 onwards. Regulations 17.2 (b) of the GERC (Multi-Year Tariff) Regulations, 2016 provides for submission of detailed application comprising of Truing up and ARR for control period i.e., 29th March 2016 to 31st March 2021 and revenue gap or revenue surplus thereof for the ensuing year for the determination of tariff to be carried out under the GERC (MYT) Regulations, 2016 and amendment thereof from time to time.

The True up year and the ensuing year in the present case is FY 2021-22 and FY 2023-24 respectively, however, the GERC (MYT) Regulations, 2016 which has been notified on 29th March, 2016 were in force till 31st March 2021. While the Commission had initiated the process of framing the MYT Regulations for the 4th Control Period and the process was delayed due to circumstances and reasons beyond the control of the Commission. Considering the delay, the Commission vide its Suo- Motu Order No. 07 of 2020 dated 22nd December, 2020 deferred the 5-year control period for new MYT Regulations for one year. Due to ongoing pandemic, the process was further delayed due to circumstances and reasons beyond the control of the Commission. The Commission vide its Order in Suo-Motu Petition No. 1995 of 2021 dated 24th September, 2021 deferred the next MYT Control period by one more year. Further, the Commission vide its Order in Suo-Motu Petition No. 2140 of 2022 dated 20th October, 2022 deferred the next MYT Control period by one more year and accordingly, all the concerned utilities and licensees were directed to file True up for FY 2021-22 and annual ARR for FY 2023-24 and application for determination of tariff for FY 2023-24 based on the principles and methodology as provided in the GERC (MYT) Regulations, 2016 on or before 15th December, 2022. In this regard, the Petitioner sought time extension for filing of Petition up to 31.12.2022.

Subsequently, the Petitioner filed the current Petition for truing-up of FY 2021-22, and determination of ARR and tariff for FY 2023-24 on 29th December, 2022.

After technical validation of the petition, it was registered on 9th January, 2023 and as provided under Regulation 29.1 of GERC MYT Regulations, 2016, the Commission has proceeded with this tariff order.



1.2. Torrent Power Limited (TPL)

Torrent Power Limited (TPL), a company incorporated under the Companies Act, 1956 is carrying on the business of Generation and Distribution of Electricity in the cities of Ahmedabad, Gandhinagar and Surat. The present petition has been filed by TPL Generation (Ahmedabad) for its generation business in Ahmedabad.

TPL had assumed the business, consequent upon the amalgamation of Torrent Power Ahmedabad Limited (TPAL), Torrent Power Surat Limited (TPSL) and Torrent Power Generation Limited (TPGL) with Torrent Power Limited. Besides, TPL is also engaged in other businesses, which do not come under the regulatory purview of the Commission. TPL has existing generation facilities, with a total installed capacity of 362 MW, at Ahmedabad and has a Combined Cycle Power Plant (CCPP) of 1147.5 MW (SUGEN) and its extension UNOSUGEN (382.5MW) capacity near Surat out of which a share of 835 MW from SUGEN and 278 MW from UNOSUGEN are allocated for Gujarat (Ahmedabad, Gandhinagar and Surat).

1.3. Commission's Tariff Order for FY 2022-23

The Petitioner filed a petition for Truing—up of FY 2020-21 and determination of tariff for FY 2022-23 on 30th November, 2021. The petition was registered on 03rd December, 2021 (Case No. 2033 of 2021). The Commission vide order dated 31st March, 2022 approved Truing—up of FY 2020-21 and determination of tariff for FY 2022-23.

1.4. Background of the present petition

The Commission has notified the GERC (MYT) Regulations, 2016 for the control period of FY 2016-17 to FY 2020-21. Regulation 16.2 (iii) of the GERC (MYT) Regulations, 2016 provides for the truing up of previous year's expenses and revenue based on audited accounts vis-à-vis the approved forecast and categorization of variation in performance as those caused by factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (uncontrollable factors).



Further, Regulation 16.2 (vi) of the GERC (MYT) Regulations, 2016 provides for annual determination of tariff for the Generating Company, Transmission Licensee, SLDC, Distribution Wire Business and Retail Supply Business, for each financial year, within the Control Period, based on the approved forecast and results of the truing up exercise.

The Commission, vide its order dated 20th October, 2022 has directed the utilities to file the petition for determination of tariff for FY 2023-24 based on the principles and methodology as provided in the GERC (Multi Year Tariff) Regulation, 2016.

1.5. Registration of the Current Petition and the Public Hearing Process

The Petitioner submitted the current Petition for Truing—up of FY 2021-22 and determination of tariff for FY 2023-24 on 29th December, 2022. After technical validation of the petition, it was registered on 9th January, 2023 (Case No. 2179 of 2023) and as provided under Regulation 29.1 of the GERC MYT Regulations, 2016, the Commission has proceeded with this tariff order.

In accordance with Section 64 of the Electricity Act, 2003, TPL(D)-Ahmedabad was directed to publish its application in the newspapers to ensure public participation.

The Public Notice, inviting objections / suggestions from the stakeholders on the Truing up and tariff determination petition filed by TPL, was published in the following newspapers:

Table 1.1: List of Newspapers in which Public Notice was published by the Petitioner

S. No.	Name of Newspaper	Language	Date of Publication
1	The Indian Express (Ahmedabad Edition)	English	14/01/2023
2	Gujarat Samachar (Ahmedabad Edition)	Gujarati	14/01/2023
3	Sandesh (Ahmedabad Edition)	Gujarati	14/01/2023

The Petitioner also placed the Public Notice and the petition on its website (www.torrentpower.com), for inviting objections and suggestions. The interested parties / stakeholders were asked to file their objections/suggestions on the petition



on or before 13th February, 2023.

The Commission also placed the petition and additional details received subsequently from the Petitioner on its website (www.gercin.org) for information and study of all the stakeholders.

The Commission also issued a notice for Public Hearing in the following newspapers in order to solicit wider participation by the stakeholders:

Table 1.2: List of Newspapers in which Public Notice for Hearing was published by the Commission

S. No.	Name of Newspaper	Language	Date of Publication
1	The Indian Express	English	21/02/2023
2	Divya Bhaskar	Gujarati	21/02/2023
3	Gujarat Samachar	Gujarati	22/02/2023

The Commission received objections / suggestions from the consumers / consumer organizations as shown in Table below. The Commission examined the objections / suggestions received from the stakeholders and fixed the date for public hearing for the petition on 02^{nd} March, 2023 at 11.30 a.m.

Table 1.3Venue & Schedule of Public Hearing

Petitions	Date & Time	Venue
TPL-G, TPL-D(A), TPL-D(S) and TPL-D(D)	02 nd March 2023 at 11:30 A.M	GERC Office, Gandhinagar

The status of stakeholders who submitted their written suggestion/objections, those who remained present in public hearing, those who could not attend the public hearings and those who made oral submissions is given in the Table below:

Table 1.4: List of Stakeholders

S. No.	Name of Stakeholders	Written Submission	Oral Submission	Presence in Public Hearing
1	Users Welfare Associations	Yes	Yes	Yes
2	Reliance Jio Infocomm Ltd.	Yes	No	No
3	Shri Vishnubhai Desai	Yes	No	No



S. No.	Name of Stakeholders	Written Submission	Oral Submission	Presence in Public Hearing
4	Military Engineer Services	Yes	No	No
5	Gujarat Chamber of Commerce & Industry	Yes	No	No
6	Shri K.K. Bajaj	Yes	Yes	Yes
7	Clean Max	Yes	No	No

A short note on the main issues raised by the objectors in the submission in respect of the petition, along with the response of TPL-D (A) and the Commission's views on the response, are given in Chapter 3.

1.6. Approach of this Order

The GERC (Multi-Year Tariff) Regulations, 2016 provide for "Truing up" of the previous year and determination of Tariff for the ensuing year.

TPL has approached the Commission with the present Petition for "Truing up" of the FY 2021-22 and determination of Tariff for the FY 2023-24.

The Commission has undertaken the "Truing up" for FY 2021-22, based on the submissions of the Petitioner. The Commission has undertaken the computation of gains and losses for FY 2021-22, based on the annual accounts and final ARR for FY 2021-22 as approved in Tariff Order dtd. 31st March, 2021 in Case No. 1926 of 2021.

While truing up of FY 2021-22, the Commission has been primarily guided by the following principles:

- Controllable parameters have been considered at the level approved in the order, unless the Commission considers that there are valid reasons for revision of the same.
- Uncontrollable parameters have been revised based on the actual performance observed.
- The Truing up for the FY 2021-22 has been considered, based on the GERC (MYT) Regulations, 2016.

Determination of ARR and Tariff for FY 2023-24 has been considered as per the methodology and principles adopted in the GERC (Multi- Year Tariff) Regulations, 2016 and amendment thereof as the base. Truing up of FY 2023-24 shall be carried out based on the principles and methodology adopted in GERC (MYT) Regulations, 2016.



1.7. Contents of this Order

The order is divided into nine Chapters as detailed under:

- 1. The first chapter provides a brief background regarding the Petitioner, the petition on hand and details of the Public Hearing process and approach adopted in this Order.
- 2. The second chapter outlines the summary of TPL-D (A)'s petition
- 3. The third chapter deals with the objections raised by various stakeholders, TPL's response and Commission's views on the response
- 4. The fourth chapter focuses on the details of truing up for FY 2021-22
- 5. The fifth chapter deals with the determination of tariff for FY 2023-24
- 6. The sixth chapter deals with compliance of directives and issue of fresh directives.
- 7. The seventh chapter deals with FPPPA charges
- 8. The eighth chapter outlines the Wheeling Charges and Cross-Subsidy Surcharge
- 9. The ninth chapter deals with tariff philosophy and tariff proposals



2. Summary of TPL-D (Ahmedabad)'s Petition

2.1. Introduction

TPL-D (A) has submitted the current petition seeking Truing up of ARR for FY 2021-22 and approval of ARR for FY 2023-24. The Petitioner has also submitted the tariff proposal for FY 2023-24, based on the Revenue Gap for FY 2021-22 and ARR for FY 2023-24.

2.2. Actuals for FY 2021-22 submitted by TPL-D (A)

The details of expenses under various heads of ARR approved by the Commission for ARR of FY 2021-22 and actuals in FY 2021-22 are as given in the Table below:

Table 2.1: Actuals Claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Order	Actual
Power Purchase	3,914.72	4601.02
O&M Expense	362.59	361.60
Depreciation	281.44	265.87
Interest on Loans	168.50	117.04
Interest on Security Deposit	41.50	36.13
Interest on Working Capital	-	-
Bad Debts written off	4.24	4.69
Contingency reserve	0.60	0.60
Return on Equity	314.12	295.89
Income Tax	34.79	46.47
Less: Non-Tariff Income	-	55.15
Net ARR	5,133.56	5,674.17

2.3. Sharing of gains and losses for FY 2021-22

The sharing of gains and losses as projected by TPL-D (A) is as depicted below.

Table 2.2: Summary of Sharing of Gains and Losses for TPL-D (A) for FY 2021-22 (Rs. Crore)

S. No	Particulars	Approved	Actual	Deviation	Controllable	Uncontrollable
1	Power Purchase Expenses	3,914.72	4,601.02	-686.30	102.82	-789.12
2	Operation & Maintenance Expenses	362.59	361.60	0.99	0.99	0.00



S. No	Particulars	Approved	Actual	Deviation	Controllable	Uncontrollable
3	Depreciation	281.44	265.87	15.57	-	15.57
4	Interest on Loans	168.50	117.04	51.46	-	51.46
	Interest on Security Deposit	41.50	36.13	5.37		5.37
5	Interest on Working Capital	-	-	-	-	-
6	Bad debts written off	4.24	4.69	-0.45	-0.45	-
7	Contribution to contingency reserves	0.60	0.60	-	-	-
8	Total Revenue Expenditure	4,773.59	5,386.96	-613.37	103.35	-716.72
9	Return on Equity Capital	314.12	295.89	18.23	-	18.23
10	Income Tax	80.64	46.47	34.17	-	34.17
11	Less: Non-Tariff Income	34.79	55.15	-20.36	-	-20.36
12	Aggregate Revenue Requirement	5,133.56	5,674.17	-540.60	103.35	-643.96

2.4. Summary of ARR, Revenue at Existing Tariff and Proposed Revenue Gap for FY 2021-22

The Table below summarises the proposed ARR claimed by TPL-D (A) for Truing up, revenue from sale of power at existing tariff and the revenue gap estimated for FY 2021-22.

Table 2.3: True-up ARR claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars		Claimed
ARR as per Order	(a)	5133.56
Gains/(Losses) due to Uncontrollable factors	(b)	(643.96)
Gains/(Losses) due to Controllable factors	(c)	103.35
Pass through as tariff	d= - (c/3+b)	609.51
Trued-up ARR	e= a + d	5,743.07

The Table below summarises the Revenue Gap/(Surplus) for TPL-D (A) for FY 2021-22:

Table 2.4: Revenue Gap/ (Surplus) for TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Claimed
Trued-up ARR	5,743.07
Revenue from Sale of Energy	5,652.05
Less; Revenue towards recovery of Earlier year's approved gap/(surplus)	289.39
Balance Revenue	5,362.66
(Gap)/Surplus	380.41



2.5. ARR, Revenue at Existing Tariff and Revenue Gap / Surplus for FY 2023-24

Table 2.5: Revenue Gap/ (Surplus) of TPL-D (A) for FY 2023-24 (Rs. Crore)

Particulars	Claimed
ARR for FY 2023-24	6794.11
Less: Revenue from sale of power at existing rates incl. base FPPPA revenue @2.66 per unit	6,937.24
Revenue from Open Access Charges	11.52
Gap/(Surplus)	(154.66)

TPL-D (A) has claimed the cumulative revenue gap/(surplus) for FY 2023-24 as detailed in the Table below:

Table 2.6: Cumulative Revenue (Gap)/Surplus for determination of tariff of TPL-D (A) for FY 2023-24 (Rs. Crore)

Particulars	Claimed
Gap/(Surplus) for FY 2021-22	380.41
Carrying Cost	73.24
DSM	0.22
Gap/(Surplus) for FY 2023-24	(154.66)
Cumulative Gap/(Surplus) to be recovered through tariff	299.20

2.6. TPL-D (A)'s Prayer to the Commission

- a) Admit the petition for truing up of FY 2021-22, Aggregate Revenue Requirement for FY 2021-22, and determination of tariff for FY 2023-24.
- b) Approve the trued-up Gap/ (Surplus) of FY 2021-22 including impact of change in law as set out in the petition.
- c) Approve the sharing of gains/ losses as proposed by the Petitioner for FY 2021-22.
- d) Approve the Aggregate Revenue Requirement for FY 2023-24.
- e) Approve the cumulative Gap/ (Surplus).
- f) Approve the wheeling ARR and corresponding charges for wheeling of electricity with effect from 1st April, 2023.
- g) Approve the recovery of Regulatory Charge as proposed and/or through retail tariff of FY 2023-24.
- h) Allow recovery of the costs as proposed as per the Judgments/ orders of the



Hon'ble Tribunal/ Commission in the Appeals/ Review petitions filed by the Petitioner.

- i) Allow additions/ alterations/ changes/ modifications to the petition at a future date.
- j) Permit the Petitioner to file all necessary pleading and documents in the proceeding and documents from time to time for effective consideration of the proceeding.
- k) Allow any other relief, order or direction which the Hon'ble Commission deems fit to be issued.
- I) Condone any inadvertent omissions/ errors/ rounding off difference/ shortcomings.



3. Brief outline of Objections raised, Response from TPL-D (A) and the Commission's view

3.1. Public response to the petition

In response to the public notice inviting objections / suggestions from the stakeholders on the Petition filed by TPL-D (A) for Truing up of ARR for FY 2021-22 and determination of Tariff for FY 2023-24 under the GERC (MYT) Regulations, 2016, a number of Consumers / organizations filed their objections / suggestions in writing. Some of these Objectors participated in the public hearing also. The objections / suggestions by the consumers / consumers' organizations, the response from the Petitioner and the views of the Commission are given below:

3.2. Issue-wise submissions, replies and the Commission's view

3.2.1. Details of power purchase cost of SUGEN and UNOSUGEN

The Objector has suggested that the fixed charges may be payable based on PLF instead of PAF.

Petitioner's response

The Petitioner submits that it has been furnishing all requisite details of power purchase cost in line with the MYT Regulations. It is reiterated that UNOSUGEN (Unit40) is an expansion of the existing SUGEN plant (Unit10 to Unit30). However, it may kindly be noted that fixed cost pertaining to UNOSUGEN for FY 2021-22 has been considered in compliance with the order of Hon'ble Commission. As regards contention that capacity charge should be approved on the basis of PLF, it is to submit that, during FY 2021-22, SUGEN/UNOSUGEN was available beyond normative PAF. Accordingly, as per the applicable Regulations, Capacity Charge are payable based on PAF and cannot be linked to PLF.



Commission's view

The Commission has noted the objection and response of the petitioner. The fixed charges are payable based on the PAF as per the existing regulations of GERC and CERC.

3.2.2. Purchase of Power from higher rates to compensate power from SUGEN & UNOSUGEN

The Objector has submitted that the TPL is purchasing power at higher rates to compensate the shortfall from SUGEN and UNOSUGEN

Petitioner's response

The Petitioner has encountered the issue of lower generation from all generating stations (InSGS and ISGS) located in the State, denial of NOC for open access, transmission constraints in ISTS, higher prices of imported coal and gas, and higher demand resulting in higher prices in power exchange. In turn, the Petitioner has sourced power in a manner to optimize the overall power purchase cost, as a prudent utility practice.

Commission's view

The Petitioner has clarified the issue in his response.

3.2.3. Power Purchase for FY 2023-24

The Objector has submitted contentions related to power purchase for FY 2023-24.

Petitioner's response

Petitioner submitted that, recently, there is substantial volatility in the Power Sector owing to various aspects such as increase in the cost of Gas and imported coal due to the ongoing geo-political issues, shortfall of Domestic coal, shift of Captive Consumers / Open Access users to Distribution Licensee (owing to price increase in their respective sources) etc. It may be noteworthy that issues related to higher prices of



fuel as well as substantial surge in demand has been appreciated by MoP and therefore, MOP has issued direction u/s 11 to all imported coal-based plants to run at the full capacity. Under the circumstances, the Petitioner will have to ensure availability of long-term sources so as to ensure USO. At the same time, the Petitioner will exercise necessary business prudence to optimize the cost, as may be feasible, while ensuring reliability of sources. Accordingly, the Hon'ble Commission is requested to approve the power purchase cost from SUGEN/UNOSUGEN as prayed for in the petition.

Commission's View

The Commission has noted the contentions and suggestions made by the objector and the petitioner.

3.2.4. Telecom Industry may be placed under Industrial category

The Objector has suggested that the telecom sector is the backbone of digital infrastructure of the nation and 24x7 telecom services are prerequisite for seamless IT operations. At present almost 30% of the Telecom Tower's opex are related to electricity tariffs and there is a need to place Telecom Industry tariff under Industrial rates rather than commercial rates to bring the tariff on par with IT services and other industries

Petitioner's response

The nature of telecom services have evolved from basic utility service to commercial services and value added services i.e. internet services on mobiles, instant messaging services, email services, video calling, etc. Thus, the Consumers of Telecom services are placed in NRGP/LTMD category based on their contract demand/connected load.

Commission's view

The Commission has noted the suggestion and reply.



3.2.5. High Expenses

The Objector has submitted the petitioner have shown high expenses despite the facts that the tariff charges are so high. The petition of petitioner is filed with motive to increase the prices in near future it is submitted that the Petitioner is required to be directed to adopt the following measures which are still not complied.

Petitioner's response

The Objector has alleged that high expenses are shown despite that the tariff charge are so high and that the petition has been filed with the intention to increase prices in future. The Petitioner denies the allegation of the Objector and submits that it has filed the current petition for approval of the tariff proposal to recover the expenditure incurred, in line with the provisions of the Act, National Tariff Policy and GERC Regulations.

Commission's view

The objection by the Objector and the response thereon by the Petitioner are noted. The Expenses claimed by the petitioner are approved by the commission only after prudence check with respect to the audited accounts and GERC Regulations.

3.2.6. Use of Smart meters.

It is submitted that the smart meters are not installed and hence, the same is leading to extra charges on public at large for satisfying the profit of the petitioner company despite there is guidelines from the government of India for smart meters.

Petitioner's response

The Objector has stated that the Petitioner has not installed smart meters leading to extra charges on public and that there are guidelines from Government of India for smart meters.



The Petitioner would like to submit that contention of the Objector is not correct. Regarding the installation of smart meters, the Petitioner would like to clarify that the technology of smart meters is still at nascent stage. The Petitioner is evaluating the options and has proposed capex for replacement of consumer/ DT/ feeder meters with smart meter in a phased manner.

Commission's view

The Commission has noted the objections and Petitioner's submission.

3.2.7. Old Plant & Machinery

The Objector has raised a general concern regarding old plant and machinery and observed that there is low investment leading to low production and high price.

Petitioner's response

The Petitioner would like to submit that the Petitioner keeps its network in well maintained condition through regular O&M activities to ensure efficiency of its operations.

Commission's view

The regulations stipulate strict norms on the technical performance of the infrastructure and the O&M expenses are approved after prudence check and as per the GERC regulations.

3.2.8. Power from Wind and Solar Power Plants

The Objector has alleged that the Petitioner is not focusing on wind/solar and natural source of production.

Petitioner's response

The Petitioner refutes the allegation of the Objector as factually it is incorrect and would like to submit that it procures power from the approved sources which includes both conventional and renewable energy sources.



Commission's view

The commission notes the contentions of the objector and the response of the petitioner.

3.2.9. Electricity Theft

The Objector has alleged that there are many cases of electricity theft and same is required to be stopped.

Petitioner's response

The Petitioner would like to submit that it has been making consistent efforts to contain the distribution losses. Consequent to the efforts, the Petitioner has one of the lowest distribution losses in the country.

Commission's view

The Commission has noted the objection and response of the petitioner and instructs the Petitioner to continue the efforts to further reduce electricity theft cases.

3.2.10. Audit by CAG

The Objector has referred to the account details produced by the Petitioner and suggested to conduct audit from CAG or independent agency.

Petitioner's response

The accounts are prepared and maintained in accordance with the accounting standards issued by the Institute of Charted Accountants of India and the same are duly verified by the statutory auditors of the company.

Commission's view

The Commission has noted the suggestion and the response of the petitioner.



3.2.11. Wheeling and Retail Supply

The Objector has submitted that there are no wheeling losses of the petitioner and no ground has been stated in the petition related to it. The petitioner is mixing up the issue with regard to the supply of electricity and network used for supply. The Objector also stated that there is no cost or charges for the distribution as the same are automatic in overall cost of the petitioner and the transmission tariff would be same irrespective of amount of electricity supplied.

Petitioner's response

Petition has been filed as per provisions of the GERC MYT Regulations, 2016 which inter-alia provides for segregation of ARR into wheeling and retail supply business. Accordingly, approval for determination of wheeling charges and retail supply tariff is sought.

Commission's view

The Commission has to segregate the ARR for Distribution Wire Business and for Retail Supply Business in accordance with Regulation 27.2 of GERC MYT Regulation, 2016 and it is also required to determine the Open Access Charges.

3.2.12. Separate Slab for Armed Forces

The Objector has referred to the Ministry of Power letter dated 15th February, 2021 and stated that since Armed Forces are buying power as a bulk user for largely domestic purpose and the power is not being used for industrial activity, creation of a special tariff slab for Armed Forces by GERC would be desirable.

Petitioner's response

the Petitioner would like to submit that Section 62 of the Act provides that 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. Accordingly, MES has been covered under HTMD-1 category as per tariff orders passed by this Hon'ble Commission for all past periods.

In this background, the Petitioner has continued the existing tariff structure which has been evolved over a period based on certain widely recognized bests practices and in accordance with the legal framework. Hence, the Petitioner respectfully suggests that there is no requirement of any change. However, the Hon'ble Commission may take appropriate view in this regard and ensure that there is no creation of new level of cross subsidy due to such tariff recategorization.

Commission's view

The Commission has noted the suggestion and reply.

3.2.13. TPL-Generation Cost for FY 2021-22

The objector has referred to the difference in the trued up ARR of TPL-G(APP) and power purchase cost of TPL-G(APP) considered in the truing up petition of TPLD(A) and sought reconciliation.

Petitioner's response

The Petitioner submits that the trued up ARR of TPL-G (APP) for FY 2021-22 is corresponding to actual generation whereas the power purchase cost considered for TPL-D(A) is corresponding to the scheduled generation in line with the provisions of the MYT Regulations. Therefore, the difference as regards figures pointed out by the Objector are duly clarified.

Commission's view

The Commission has noted the objections and the response by the petitioner.

3.2.14. RPO Compliance

The Objector has submitted that there is short fall in RPO compliance by the Petitioner and suggested to verify the status of RPO compliance by the Petitioner.



Renewable power shall be procured through competitive bidding, to fulfill the RPO compliance.

Petitioner's response

The Petitioner has approached the Commission seeking revision of minimum quantum of purchase (in %) from renewable energy sources for FY 2021-22. Regarding procurement of renewable power through competitive bidding, the Petitioner would like to submit that the Commission has direct TPL to procure RE power through competitive bidding and accordingly TPL will take-up RE power through competitive bidding.

Commission's view

The objection and response of the Petitioner on the same are noted.

3.2.15. Sales forecast for FY 2023-24

The GCCI has referred to the Petitioner's forecast of sales for FY 2023-24 and particularly HT category and requested the Hon'ble Commission to verify the current sales trend.

Petitioner's response

The Petitioner submits that HTMD category includes major industries in Ahmedabad like textile, chemical, process house, casting & moulding industries, and food & confectionary products. Most of these segments are facing stagnancy. Further, due to higher cost of space within the licensee area and adherence to stringent environmental norms, major expansion in industries is likely to take place outside the license area. The sales of this category have also been impacted due to wind/solar set-off and operationalization of open access.

During FY 2020-21, HT sales had gone down considerably due to COVID-19 pandemic, and it is assumed that it will take time to regain normal consumption. Now post COVID-19 pandemic, sales growth has normalized in line with pre-Covid period except for HT category. For balance categories, sales for FY 2023-24 are



worked out considering 4 Year CAGR (FY 2015-16 to FY 2019-20) over approved gross sales of FY 2022-23.

Commission's view

The commission has noted the contentions of the objector and the response of the petitioner.

3.2.16. Regulatory Charges

The Objector has submitted that the proposed regulatory charge to be spread across two years

Petitioner's response

The Petitioner submits that it has proposed the regulatory charge mainly to recover the gap arising on account of past years' under recovery and the same will be discontinued upon completion of recovery of such past under recoveries. It may kindly be noted that in case of any deferment in recovery of the regulatory charge and in turn the recovery of gap will attract the carrying cost for such unrecovered gap. Hence, the Petitioner requests to approve the regulatory charge of Rs. 0.37 per kWh for FY 2023-24, as prayed for.

Commission's view

The Commission has discussed the issue in detail in Chapter 9 of this Order.

3.2.17. Green Tariff

The Objector has referred to optional green tariff of Rs. 1.50 per unit and asked Hon'ble Commission to seek supporting details in the matter.

Petitioner's response

The Petitioner submits that the methodology for determination of "Green Tariff" is yet to be determined by the Hon'ble Commission. Meantime, the Petitioner has



proposed the "Green Tariff" at Rs. 1.50 per unit in line with the banking charges being levied for rooftop solar plants.

Commission's view

The Commission has noted the objection and response thereon by the Petitioner.

3.2.18. Additional Slab of above 400 units

The Objector has suggested that an additional slab of above 400 units per month for residential consumers may be introduced with higher tariff, so that the consumers with higher consumption of electricity shall pay higher charges.

Petitioner's response

The Petitioner would like to submit that the tariff structure is based on certain widely recognized best practices and in accordance with the legal framework. Some of the key factors considered for tariff design and as contemplated under the Act are capacity to pay, incentivizing energy conservation through telescopic tariff and promotion of efficient use of electricity. However, the Hon'ble Commission may take appropriate view in this regard in accordance with the applicable Statutory Provisions.

Commission's view

The Commission has noted the suggestion and reply.

3.2.19. Separate fixed charges for consumers installing solar roof top plants

The Objector has suggested to specify separate fixed charges reflective of fixed cost for consumers installing solar roof top plants.

Petitioner's response

The Petitioner submits that ideally the fixed cost of the licensee should be recovered through the fixed charges. However, as per existing tariff design, majority of the fixed cost is being recovered through energy charges. Hence, the Hon'ble Commission may



kindly take appropriate view to rationalize the fixed charges of the residential consumers or alternatively, introduce connected load based fixed charges. Further, consumers who install solar rooftop are paying energy charges applicable on net consumption only. This does result in cross-subsidization of consumers with higher paying capacity by consumers having lower paying capacity. The Hon'ble Commission may take appropriate view on the suggestion and may specify separate fixed charges/demand charges for consumers installing solar.

Commission's view

The Commission has noted the suggestion of the Objector and response of the Petitioner on the same.

3.2.20. Recovery of Past Period Dues

The Objector has referred to the under-recoveries of past years and suggested to clear such under-recoveries as any delay will attract carrying cost. Further, the Objector has also stated that Regulatory charges proposed by the Petitioner should be discontinued upon recovery of past dues.

Petitioner's response

The regulatory charge is proposed mainly to recover the gap arising on account of past years' under recovery and the same will be discontinued upon completion of recovery of such past under-recoveries. Further, the carrying cost for such unrecovered gap is the legitimate claim of the Petitioner to factor in time value of money due to deferment in recovery of gap. The recovery of carrying cost is the settled position of law.

Commission's view

The Commission has noted the suggestions and reply.



3.2.21. Revision in Base Price with FPPPA

The Objector has objected to the revision in the base price of power purchase cost and fuel & power purchase price adjustment and suggested to merge 50% FPPPA charges in basic slabs.

Petitioner's response

The Petitioner submits that as per approved FPPPA formula, any increase in power purchase cost during the year over and above base power purchase cost is to be recovered through FPPPA over and above base FPPPA on quarterly basis. The revised base FPPPA Charges has been worked out considering estimated power purchase cost for FY 23-24.

The Petitioner submits that by merging 50% FPPPA in the basic slabs it may be noted that the FPPPA rates vary based on the price of fuel and power purchase cost and the consumers will be benefited in case of any reduction in the cost by way of adjustment in FPPPA charges.

Commission's view

The Commissions notes the suggestions and the response of the petitioner.

3.2.22. Electricity Duty

The Objector has submitted that the Electricity Duty is very high for some category of consumers and suggested to recommend to State Government to rationalize the Electric Duty.

Petitioner's response

Electricity Duty is levied as per Electricity Duty Act and the same is within the jurisdiction of the Government.



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

Commission's view

Electricity Duty is governed by the State Act and it does not fall within the jurisdiction of the Commission.



4. Truing up for FY 2021-22

4.1. Introduction

This Chapter deals with the truing up of FY 2021-22. The Commission has studied and analysed each component of the ARR for FY 2021-22 in the following paragraphs.

4.2. Energy Sales to the Consumers

Petitioner's submission:

The Petitioner has submitted category-wise actual energy sales for Ahmedabad area for FY 2021-22 along with the sales approved by the Commission in the Order, as given in the Table below:

Table 4.1: Energy Sales for FY 2021-22 for TPL-D (A) area (MUs)

Category	Approved in	Actuals
	Order	Claimed
RGP	2,851.47	2,911.84
NRGP	1,011.59	970.82
LTMD	1,759.16	1,698.00
HT	1,830.57	2,013.04
Others	75.51	70.97
DoE Units	-	19.02
Total Sales	7,528.30	7683.69

The actual sales in FY 2021-22 is higher than that approved in the order due to increase in demand due to reopening of economy post Covid-19. Further, the installed capacity of solar rooftop has reached to about 245 MW as on 31st March, 2022. Based on above, the major reasons for deviation in category-wise sales are enumerated hereunder:

a) The actual sales for RGP category is higher than the approved sales primarily due to higher overall temperature despite the increase in number of solar rooftop installations.



- b) The Non RGP & LTMD-II category comprise of sales from commercial and industrial consumers. The actual sales for both Non RGP and LTMD-II category during FY 2021-22 are marginally lower than approved sales due to lag in pick-up of smaller industries than expected after reopening of economy post Covid-19 related lockdown.
- c) In HT category, the consumption is mainly attributed to industries and commercial establishments, water works, and pumping stations run by the local authority, temporary services, METRO, and Electric Vehicles. During FY 2021-22, the total sales in HTMD category were higher than approved mainly due to reopening of economy post Covid-19 related lockdown.
- d) In the Others category, the actual sales registered were marginally lower than approved sales due to lower sales in GLP and agriculture category.

The Petitioner has further submitted that The MYT Regulations, 2016 specifies that the variation in quantities of electricity supplied to the consumers is attributed as uncontrollable factor. Therefore, the Petitioner requests the Hon'ble Commission for the truing up of actual sales as shown in the table above.

Commission's analysis:

The actual sales in FY 2021-22 was 7683.69 MUs as against 7528.30 MUs approved in the Order dtd. 31.03.2021 due to increase in demand due to reopening of economy post Covid-19. The sales as submitted by the Petitioner have been verified, compared and confirmed with the sale of energy furnished in the monthly return under Form A specified in Rule 6(1) (A) filed by TPL-D (A) with the Chief Electrical Inspector and Collector of Electricity Duty vide additional data submitted.

In view of above, the Commission approves the energy sales as mentioned in table 4.1 above for TPL-D (A) to the tune of 7,683.69 MU for FY 2021-22.



4.3. Distribution Losses

Petitioner's submission:

The Petitioner has submitted that it has been making consistent efforts to contain the distribution losses. Consequent to the efforts, it has outperformed the distribution losses approved by the Hon'ble Commission. The Petitioner submits that the losses are operating in range-bound manner:

Table 4.2: Distribution Losses for FY 2021-22 as submitted by TPL-D (A)

Category	Approved in Order	Actuals Claimed
Distribution losses (%)	6.24%	4.17%

TPL-D (A) has submitted that the variation in the distribution loss compared to the approved value is to be considered accordingly.

Commission's analysis:

The reduction in distribution losses in the licensed area has taken place due to modernization/improvement of the distribution network, augmentation of the old assets, etc. Substantial capitalisation of assets over a period of time and concentrated efforts of the Petitioner, which has resulted in reduction in transformation losses as well as line losses and ultimately overall Distribution Losses. The Commission accepts TPL-D (A)'s submission and approves the actual Distribution Losses of 4.17% for FY 2021-22.

The Commission also accepts TPL-D (A)'s submission to treat the deviation in the distribution loss as controllable factor and share the gain accordingly.

4.4. Energy Requirement

Petitioner's submission:

The Petitioner has submitted that the actual energy requirement for Ahmedabad and Surat licensee area furnished is based on the (i) actual energy sales, (ii) transmission



loss and (iii) distribution loss for FY 2021-22 as given in the Table below:

Table 4.3: Energy Requirement for FY 2021-22 for TPL-D(A) (MUs)

Particulars	Approved in MTR Order	Actuals Claimed
Ahmedabad Supply Area		
Energy Sales (MU)	7,528.30	7,683.69
Distribution losses (%)	6.24%	4.17%
Distribution losses (MU)	501.03	334.29
Energy Input at Distribution Level (MU)	8029.33	8017.98
Transmission Loss (MU)	40.35	40.72
Energy Requirement (A)-Ahmedabad Area	8069.68	8058.70
Energy Requirement (B)-Surat Supply Area	3406.08	3491.37
Total Energy Requirement (A+B)	11475.76	11,550.07

The Petitioner submitted that the total energy requirement was met through various sources as discussed in the subsequent section.

Commission's analysis:

The actual energy requirement submitted by the Petitioner for FY 2021-22 along with energy requirement as per the Order dtd. 31.03.2021 has been examined and verified by the Commission. The Commission observed that there is an increase of 74.31 MUs in the energy requirement for TPL-D (A) and TPL-D (S) against the quantum of 11475.76 MUs approved in the same order.

The actual energy requirement is higher than that approved in the Order due to increase energy sales. The actual energy requirement being the sum of energy sales, Transmission Losses and Distribution Losses, works out to 11550.07 MUs for FY 2021-22.

The Commission accordingly approves the energy requirement at 11,550.07 MUs for truing up of FY 2021-22 as given in the above Table 4.3.

4.5. Energy Availability

Petitioner's submission:

The Petitioner has submitted that the power is sourced collectively for Ahmedabad



and Surat License area from TPL-G (APP), SUGEN, Renewable Sources of Energy and other sources such as Bilateral and purchase through Power Exchange. The sourcewise power purchase is given in the Table below:

Table 4.4: Energy Availability (Net) for FY 2021-22 for Ahmedabad & Surat (MUs)

Particulars	Approved in Order	Actuals Claimed
TPL-G (APP)	2,451.59	2,240.86
SUGEN/ UNOSUGEN	7,073.29	5,493.55
Bilateral	-	759.60
Power Exchange	-	1,584.13
Renewables	1,950.88	1,184.07
Sub-Total	11,475.76	11,262.20
Add: sale of surplus power/UI/wind setoff	-	287.87
Total	11,475.76	11,550.07

During FY 2021-22, overall higher off-take is mainly on account of increase in power requirement due to reopening of economic activity post lifting of COVID-19/lockdown.

During FY 2021-22, the Petitioner has procured power from TPL-G (APP), SUGEN, UNO SUGEN, Renewable Sources of Energy and Bilateral and also balance requirement has been fulfilled through procurement of top up power from power exchange.

The Petitioner has further submitted that Regulation 4.1 of the GERC (Procurement of Energy from Renewable Energy Sources) Regulation, 2010 specifies the Renewable Power Purchase Obligation (RPPO). Subsequently, the Commission notified the GERC (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018 specifying RPPO for FY 2021-22. TPL-D has made all efforts to fulfill its RPPO.

The renewable energy requirement and renewable energy sourced for FY 2021-22 for TPL-D (A) and TPL-D (S) combined, is as under:

Table 4.5: RPPO submitted by TPL for FY 2021-22

Particulars	Actuals Claimed
Energy Requirement	11550.07



Particulars	Actuals Claimed
RE Procurement	
Wind Energy to procured (@8.25%)	952.88
Solar Energy to procured (@8.00%)	924.01
Biomass/Bagasse/Others (@0.75%)	86.63
Total (@15.65%)	1,963.51
Compliance (Non-Solar)	
Wind	914.47
Non-Solar REC	-
Compliance	914.47
Compliance (% of Energy Requirement)	7.92%
Compliance (Solar Energy)	
Solar	571.33
Solar REC	-
Compliance	571.33
Compliance (% of Energy Requirement)	4.95%

The Petitioner has submitted that they approached the Commission in the matter of revision of minimum quantum of purchase (in %) from renewable energy sources for FY 2021-22 in accordance with the RPO Regulations vide its petition No. 2153 of 2022.

Commission's analysis:

The sources of power approved by the Commission in the Order dated 31.03.2021 are AMGEN, SUGEN, UNO SUGEN, Bilateral Sources, Power Exchange and Renewable Energy. The Commission had approved the total quantum of power purchase at 11,475.76 MUs for TPL-D (A) and TPL-D (S) combined for FY 2021-22 in the Order against which the Petitioner has purchased 11,550.07 MUs during FY 2021-22.

TPL-D has procured 5493.55 MU from SUGEN/ UNOSUGEN which was less than power purchase considered from the source in the Power Purchase for FY 2021-22 in the Order and simultaneously increased the power purchase from Bilateral and Power exchange. On query regarding this, it has been submitted that the entire power sector has experienced the issue of prohibitive cost of Gas and imported coal due to the ongoing geo-political issues coupled with shortfall of Domestic coal. Additionally, electricity demand has further increased as Captive Consumers in addition to Open Access users (sourcing power from Power Exchange) have switched



over to Distribution Licensee for supply of electricity owing to exorbitant increase in electricity prices on the Power Exchange and Bilateral Market. Accordingly, TPL has to procure the higher quantum of electricity from the Power Exchange in order to provide uninterrupted and reliable power while optimizing overall cost.

The Commission during the prudence check, sought reconciliation of sale of surplus power / UI / Wind setoff of 287.87 MUs as per Form – 2 against which the Petitioner has submitted the details as given below.

Particulars	MU
UI	408.74
Open Access through PX	(6.82)
Wind Set Off	(114.05)
Total	287.87

The Commission notes that TPL has procured renewable energy from the generators under preferential tariff for compliance of RPO. The RPO targets approved by the Commission as per GERC (Procurement of energy from Renewable Sources) (Third Amendment) Regulations, 2022 for FY 2021-22 are as follows:

Table 4.6: RPO Targets approved by the Commission for TPL-D

Description	FY 2021-22
Solar	8.25%
Wind	8.00%
Hydro	0.00%
Other	0.75%

TPL-D has achieved 7.92% RPO related to Non-solar and 4.95% RPO related to Solar. There is shortfall in RPO pertaining to solar and non-solar energy purchase. The Commission notes that TPL has filed a separate petition for compliance of RPO, which is pending for adjudication before the Commission. Therefore, as far as the compliance of RPO is concerned, the Commission will decide it in separate proceedings.

The Commission has considered the aforesaid aspects and accordingly approves the availability of energy during FY 2021-22 as shown in the Table below:



Table 4.7: Approved Energy Availability (Net) for FY 2021-22 for TPL-D (A) and TPL-D (S) (MUs)

Particulars	Approved in Order	Actuals Claimed	Approved by Commission for Truing-Up
TPL-G (APP)	2,451.59	2,240.86	2,240.86
SUGEN/ UNOSUGEN*	7,073.29	5,493.55	5,493.55
Bilateral	-	759.60	759.60
Power Exchange	-	1,584.13	1,584.13
Renewables	1,950.88	1,184.07	1,184.07
Sub-Total	11,475.76	11,262.20	11,262.20
Add: sale of surplus power/UI/wind setoff	-	287.87	287.87
Total	11,475.76	11,550.07	11,550.07

^{*}Note- TPL-D has procured 4192.43 Mus and 1301.12 Mus from SUGEN and UNO SUGEN respectively for TPL-D (A) & TPL-D (S) Areas during the period of FY 2021-22.

4.6. Power Purchase Cost

Petitioner's submission:

TPL has submitted the actual power purchase cost for FY 2021-22 against the power purchase cost approved in the Order as shown in the Table below:

Table 4.8: Power Purchase Cost projected by TPL for Ahmedabad and Surat area for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Actuals Claimed
TPL-G (APP)	1,157.34	1125.89
SUGEN/ UNOSUGEN	3503.19	3,371.47
Bilateral	-	408.82
Power Exchange	-	1016.10
Renewables	906.53	672.10
Total	5567.06	6594.38

The Petitioner has submitted that the quantum of power purchase depends on energy sales and distribution loss and the mix of power purchase depends on availability and cost of different sources at a point of time.

The variation in the power purchase cost from the Order is on account of variation in sales and distribution losses, variation in actual cost with respect to the base rate



along with purchase of power from short term sources to meet the shortfall during the year.

TPL has also submitted that the variation in power purchase cost is an uncontrollable component except on account variation in distribution losses and hence, the same needs to be allowed in ARR as per Regulations.

TPL submitted that the power purchase for its Ahmedabad and Surat license areas has been carried out on collective basis and the total power purchase cost has been apportioned between Ahmedabad and Surat on the basis of usage of power. Accordingly, the allocated power purchase cost for Ahmedabad Supply area is Rs. 4,601.02 Crore for FY 2021-22.

Commission's analysis:

The Commission, in its Order had approved the power purchase plan for FY 2021-22 as per the details furnished by TPL in its Case No. 1926 of 2021 dated 31.03.2021.

The Commission had approved the quantum of power purchase at 11,475.76 MUs for FY 2021-22 in the Order against which TPL has purchased 11,550.07 MUs. The Commission has approved power purchase cost of Rs. 5567.06 Crore for FY 2021-22 in the Order against which TPL has incurred Rs. 6594.38 Crore. The energy requirement is evaluated based on the sale of energy and losses in the transmission and distribution system of Ahmedabad / Gandhinagar and Surat license area. The energy requirement for TPL-D (A) license area works out to 69.77% of the total energy requirement. Accordingly, the Petitioner has allocated power purchase cost for Ahmedabad Supply area as Rs. 4,601.02 Crore for FY 2021-22. It has been observed that there is discrepancy between the claiming of the power purchase cost for Ahmedabad Supply area as Rs. 4,601.02 Crore vis-à-vis the electric energy purchased as shown Rs. 4599.14 in segregated Audited Accounts for FY 2021-22. In this regard, it has submitted the reconciliation statement and further submitted that the Power purchase cost of AMGEN billed as per FPPPA is Rs. 1143.67 Crore. Whereas, as per True up petition, it is Rs. 1125.89 Crore. This difference of Rs. 17.78 Crore is considered in the petition. It has further submitted that Power Purchase Cost has



been apportioned between Ahmedabad and Surat based on usage of power.

The Commission observes that the total power purchase cost has increased by Rs. 1027.32 Crore for FY 2021-22 over that approved in the Order dated 31.03.2021. The variation in the power purchase cost from the order is on account of variation in sales & distribution losses, variation in actual cost with respect to the base rate along with purchase of power from short-term sources to meet the shortfall during the year.

The Commission has considered the energy scheduled from TPL-G (APP) to the tune of 2240.86 MU in energy availability of TPL-D, however against which the actual net generation was to the tune of 2222.10 MU. Thus, the power purchase cost on account of variation in actual net generation and scheduled energy of 18.75 MU is being considered and the related power purchase cost. Therefore, the Commission accordingly, approves Rs. 1125.87 Crore to be transferred in actual power purchase cost of TPL-D for FY 2021-22.

TPL-D has purchased power from SUGEN at a variable cost of Rs. 4.965/kWh as against Rs. 3.90/kWh approved by the Commission in the Order dtd. 31.03.2021. The generation cost from SUGEN plant has been mainly increased due to prohibitive cost of Gas, PLL Use of Pay Charges and Ship or Pay Charges for deficiency in MMBTU towards GSPL.

TPL-D has purchased power from UNO SUGEN at a variable cost of Rs. 3.088/kWh as against Rs. 3.14/kWh approved by the Commission in the Order dtd. 31.03.2021. on query regarding ascertaining of the landed price of power purchase including the fixed charges of UNO SUGEN not more than the prevailing landed market price for medium term power purchase during such periods, in this regard, it has submitted the medium-term price reference along with the regional and State transmission charges and losses documents along with calculation. It has been found that the landed price of UNO SUGEN as Rs. 4.878 per Unit (including the fixed charges excluding the Transmission charges) is quite lesser than the prevailing landed market price for medium term power purchase as Rs. 5.48 per Unit during FY 2021-22, which



is in line with the Case No. 1322 of 2103 dated 19.06.2019.

The Petitioner has procured power from bilateral sources to meet the shortfall of energy from tied-up sources and balance requirement has been fulfilled through procurement of top up power from power exchange. The Petitioner has procured short-term power from Indian Energy Exchange (IEX) at the rate of Rs. 6.41 / kWh as submitted in Form 2. The Petitioner has also purchased power from bilateral sources at Rs. 5.38 / kWh as submitted in Form 2. Similarly, the bilateral power price was not considered for computation for FY 2021-22, which went up to Rs. 5.38 / kWh during the truing up period i.e. FY 2021-22. In this regard, it has been submitted that the entire power sector has experienced the issue of prohibitive cost of Gas and imported coal due to the ongoing geo-political issues coupled with shortfall of Domestic coal. Additionally, electricity demand has further increased as Captive Consumers in addition to Open Access users (sourcing power from Power Exchange) have switched over to Distribution Licensee for supply of electricity owing to exorbitant increase in electricity prices on the Power Exchange and Bilateral Market. Accordingly, TPL has to procure the higher quantum of electricity from the Power Exchange in order to provide uninterrupted and reliable power while optimizing overall cost. These are the major reasons which have increased the power purchase cost of TPL.

The Commission has specified the minimum RPO to be fulfilled by the Petitioner as per the GERC (RPO) Regulations. Regarding the procurement from the Renewable Sources by the Petitioner during FY 2021-22, it has procured at the rates of Rs. 4.748 per Unit and Rs. 8.085 per Unit respectively from the Wind and Solar sources.

The Commission has approved the power purchase cost for FY 2021-22 as given in the Table below:

Table 4.9: Approved Power Purchase Cost for TPL-D (A) and TPL-D (S) for FY 2021-22 (Rs. Crore)

Energy Sources	Approved in Order	Actuals Claimed	Approved by Commission
TPL-G (APP)	1,157.34	1125.89	1125.87
SUGEN	2633.41	2 271 47 —	2736.79
UNO SUGEN	869.78	3,371.47 -	634.67



Energy Sources	Approved in Order	Actuals Claimed	Approved by Commission
Bilateral	-	408.82	408.82
Power Exchange	-	1016.10	1,016.10
Renewables	906.53	672.10	672.10
Total	5567.06	6594.38	6594.35

Considering the approved power purchase cost of Rs.6,594.35 Crore for the approved total energy procurement of 11,550.07 MUs, the per unit power purchase cost works out to Rs. 5.709 / kWh for FY 2021-22.

The Commission has approved the energy requirement of TPL-D (A) license area at its periphery which is 8,058.70 Mus. The power purchase cost for TPL-D (A) license area based on the allocation of 69.77% is worked out as Rs.4,601.01 Crore and accordingly approved the same for FY 2021-22.

4.6.1. Sharing of Gains/Losses due to reduction in Distribution Losses

Petitioner's submission:

The variation in distribution losses has resulted in reduction in the energy requirement, which in turn has reduced the cost of power purchase. Accordingly, the reduction in power procurement cost due to lower distribution losses is treated as controllable.

For the purpose of calculation of gains on account of reduction in distribution loss, the loss level approved by the Commission in tariff order has been considered as base level by the Petitioner the gains due to reduction in distribution loss at Rs. 102.82 Crore. The calculation of gains on account of reduction in distribution loss is quantified as per the table below.

Table 4.10: Gain due to reduction in energy requirement for FY 2021-22 claimed by TPL-D (A)

Particulars	Unit	Legend	Actual Claimed
Actual Energy purchased at distribution level	MU	(a)	8,017.98
Energy Sales	MU	(b)	7,683.69
Wheeling Energy -OA/RE	MU	(c)	139.14



Particulars	Unit	Legend	Actual Claimed
Total wheeled units	MU	(d)=(b)+(c)	7,822.83
Approved Distribution losses	%	(e)	6.24%
Energy required at distribution level at approved loss	MU	(f)=(d)/(1-(e))	8,343.46
Difference	MU	(g)=(f)-(a)-(c)	186.34
Units recovered as loss	MU	(h)	6.25
Reduction in Energy Requirement	MU	(i)=(g)-(h)	180.09
Average PPC	Rs./kWh	(j)	5.71
Savings	Rs. Crore	(k)=(i)*(j)/10	102.82

Commission's analysis:

The Commission has approved distribution loss at 6.70% in the Order dtd. 31.03.2021 whereas TPL has claimed the actual distribution loss at 4.17% for FY 2021-22. The Commission has worked out gain on account of reduction in distribution losses as shown in the Table below:

Table 4.11: Approved Gains due to reduction in Distribution Losses for FY 2021-22

Particulars	Unit	Legend	Approved
Actual Energy purchased at distribution level	MU	(a)	8,017.98
Energy Sales	MU	(b)	7,683.69
Wheeling Energy -OA/RE	MU	(c)	139.14
Total wheeled units	MU	(d)=(b)+(c)	7,822.83
Approved Distribution losses	%	(e)	6.24%
Energy required at distribution level at approved loss	MU	(f)=(d)/(1-(e))	8,343.46
Difference	MU	(g)=(f)-(a)-(c)	186.34
Units recovered as loss	MU	(h)	6.25
Reduction in Energy Requirement	MU	(i)=(g)-(h)	180.09
Average PPC	Rs./kWh	(j)	5.71
Savings	Rs. Crore	(k)=(i)*(j)/10	102.82

The Commission, accordingly, approves the gain on account of reduction in distribution loss at Rs. 102.82 Crore during FY 2021-22 for truing up.

4.7. Fixed Charges

4.7.1. Operation and Maintenance (O&M) Expenses

Petitioner's submission:



TPL has claimed Rs.361.60 Crore as O&M expenses marginally lower than the total O&M expenses of Rs.362.59 Crore approved for FY 2021-22 in the Order as detailed in the Table below:

Table 4.12: O&M expenses claimed by TPL- Ahmedabad for FY 2021-22

(Rs. Crore)

Particulars	Approved in Order	Claimed by Petitioner
Operation & Maintenance Expenses	362.59	361.60

The Petitioner has submitted that the variation in O&M expenses should be considered as controllable.

The Petitioner has further submitted that it has excluded the expenses for identified employees who are part of the implementation of SURYA scheme in its license area.

Commission's analysis:

TPL-D (A) has submitted the actual O&M expenses at Rs.361.60 Crore inclusive of impact of "Re-measurement of Defined Benefit Plans" of (-) Rs.1.49 Crore in the truing- up for FY 2021-22.

It is observed from the Annual Accounts, the O&M Expenses are Rs. 361.60 Crore; whereas TPL has claimed O&M Expenses of Rs.361.60 Crore. The head-wise analysis is as under:

a) Employee Expenses: The Commission observed that the Employee Expenses as per annual accounts are Rs. 130.97 Crore net of expenses capitalized of Rs. 119.30 Crore. The Petitioner has added commission to non-executive directors of Rs. 0.87 Crore (from A&G expense head) and deducted expense towards Re-measurement of Defined Benefit Plans of Rs. 1.49 Crore as appearing in P & L Statement.

It has been observed that the Petitioner has further deducted an amount of Rs. 0.89 Crore towards the cost of the Surya Gujarat Solar rooftop scheme in the employee cost. On query regarding this, the Petitioner has stated that as per the



clause 5.2.1, 5.2.2 and 5.2.7 of the MNRE Guidelines dated 20.08.2019 on "Implementation of Phase — I I of Grid Connected Rooftop Solar Programme for achieving 40 GW capacity from Rooftop Solar by the year 2022", the Petitioner is required to treat incentive and expense separately from tariff exercise. It has further furnished the copy of the MNRE guideline dated 20.08.2019. Therefore, the Commission deducted the same amount from the employee cost as submitted by the Petitioner. Accordingly, the employee expenses are Rs. 129.46 Crore.

b) A&G Expenses: A&G expense as per annual accounts are Rs. 110.39 Crore net of expenses capitalized of Rs. 27.49 Crore. The Petitioner has claimed A&G expenses after reduction on account of Commission to Non-Executive Directors (Rs. 0.87 Crore), Bad Debts Written off-net (Rs. 2.23 Crore), insurance claim receipt (Rs. 0.06 Crore), Allowance of doubtful debts (Rs. 3.24 Crore), sponsorship expenses NIL, Advertisement Expenses (Rs. 0.03 Crore), Gardening Expenses (Rs. 0.44 Crore), DSM Expense of (Rs. 0.22 Crore) and add lease payments (Rs. 0.25 Crore). Since the Commission has considered Insurance Claim Receipt as a part of Non-Tariff Income, the same has not been reduced from A&G expenses as per the approach adopted in previous Tariff Orders.

On query regarding increase in Consumption of spares in FY 2021-22 w.r.t. previous year, it has submitted that the consumption of spares has increased mainly due to increase in the Capex activity along with inflation in cost of material.

Accordingly, the Commission approves the A&G expense of Rs. 110.09 Crore for FY 2021-22.

c) R&M Expenses: The Petitioner has claimed R & M expense of Rs. 111.25 Crore as per actual cost incurred duly verified by the Commission from Annual Audited Accounts. The Commission, accordingly, approves R & M expense of Rs. 111.25 Crore.

The Commission, accordingly, approves the O&M expenses of Rs.361.60 Crore in truing up for FY 2021-22.



Further as per Regulation 22 of the GERC (MYT) Regulations, 2016 the variation in O&M expenses is to be considered as controllable.

Accordingly, as per the GERC (MYT) Regulations, 2016 Gain/(Losses) on account of O&M expenses in the truing up of FY 2021-22 is approved by the Commission as given in the Table below:

Table 4.13: O&M Expenses approved by the Commission for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Approved in Truing-Up	Deviation	Gains/(Losses) due to Controllable	Gains/(Losses) due to Uncontrollable
O&M Expenses	362.59	361.66	0.93	0.93	-

4.7.2. Capital Expenditure, Capitalization and Sources of Funding

Petitioner's submission:

The Petitioner has claimed capital expenditure of Rs. 980.49 Crore in the truing up for FY 2021-22, based audited annual accounts as against Rs.1585.34 Crore approved in the Order dated 31st March, 2021 as per the details given in the Table below:

Table 4.14: Capital expenditure claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Claimed by Petitioner
EHV	997.65	442.07
HT Network	221.17	237.83
LT Network	164.63	177.58
Metering	30.91	17.11
PSC	114.22	91.98
IT & related expenditure	14.87	6.58
Other Depart.	41.90	7.34
Total Cost	1,585.34	980.49

TPL has submitted that the capital expenditure incurred for Ahmedabad Supply Area in FY 2021-22 is Rs. 980.49 Crore which is lower than the approved value. TPL has given reasons for the major variances in the actual expenditure against the approved expenditure as detailed below:



- (a) EHV Network The Commission had approved the capital expenditure of Rs. 997.65 Crore for EHV. In this regard, the Petitioner has incurred the expenditure of Rs. 442.07 Crore. The major variation is on account of expenditure incurred towards the following:
 - Bulk Supply Points: During FY 2021-22, capex was primarily incurred towards
 installation of bus reactor at New Pirana and construction of bulk supply point
 at Acher, Gandhinagar, and Thaltej. However, capital expenditure related to
 these supply points have been deferred due to delay in permissions/ approval
 by various authorities.
 - EHV line: Under this head, the major expenditure incurred is towards LILO at Thaltej GIS.
 - EHV Projects: During FY 2021-22, the major expenditure incurred under this
 head pertains to 132 kV EHV Substation at Lambha. Further, expenditure was
 also incurred towards overhead to underground conversion of part of 132kV
 feeders due to infrastructure development projects by authorities such as AMC
 and NHSRCL.
 - Expenditure has also been incurred towards installation of additional transformers of 132/33 kV & 132/11 kV to enhance reliability and to cater to the load demand.
 - However, capex for 132 kV EHV Substation at SG Highway and Riverfront had to be deferred due to land related issues.
 - 33 kV Substation: During FY 2021-22, the expenditure has been incurred towards 33 kV substations at various locations such as Odhav, Gitamandir, IIT-Gandhinagar. Expenditure was also incurred towards upgradation of 33/11 kV transformers at Sumel-6 & 8 to cater to the load growth and for relieving the existing transformers.
 - However, work of 33 kV substation at locations such as Maninagar, Electronic-SEZ, Platinum Park, Shyamal Iconic were deferred due to issues in land procurement and requirement of approvals from authorities.
 - Renovation and Replacement: Expenditure under the head of renovation and replacement has been incurred primarily towards civil revamping of EHV



- substations & switchyard and phasing out of obsolete assets such as switchgears and towards.
- Safety: During FY 2021-22, major expenditure is incurred towards undergrounding of 132 kV Jamalpur-Vinzol line and switchyard work at substations along with providing lightning arrestors and firefighting equipment.
- Supporting Infrastructure: Under this head, expenditure has been incurred for procurement of relays, battery, testing equipment, etc.
- Automation: Expenditure has been primarily incurred towards EHV substation automation
- (b) HT The Commission had approved the capital expenditure of Rs.221.17 Crore for HT network and expenditure of Rs.237.83 Crore is incurred. The major variation is because of:
 - Normal load growth: Expenditure incurred is mainly towards distribution transformer installations necessitated by higher inflow of bunch applications, transformer augmentation, HT customer application processing and various network modification schemes.
 - Reliability, Renovation and Modernisation: Expenditure incurred towards transformer replacement, HT network shifting due to read widening and other infrastructure development projects and old and obsolete network upgradation.
 - <u>Safety:</u> Expenditure incurred towards replacement of old switchgear, conversion from Oil Type Distribution transformer to Dry Type Distribution Transformer, HT cable and FSP.
 - <u>Supporting Infrastructure:</u> Expenditure incurred towards testing and measuring equipment like clip on meters, cable identifier, route identifier
- (c) <u>LT:</u> The Commission had approved the capital expenditure of Rs.164.63 Crore for LT network and actual expenditure incurred is Rs.177.58 Crore. The major variation is on account of:



- Normal load growth: Expenditure is incurred mainly towards release of new connection/extension/reduction, load balancing, relieving of overloaded distributors and substation interlinking schemes. Variation in expenditure is mainly due to higher number of schemes for relieving overloaded distributors and substation interlinking.
- Reliability, Renovation and Modernisation: Expenditure has been incurred
 mainly towards shifting of LT network due to road widening and other
 infrastructure development projects and upgradation of old/obsolete
 network.
- <u>Safety:</u> Expenditure has been incurred towards replacement of LC and service revamping, Installation of fuse type MSP to enhance safety.
- <u>Supporting Infrastructure:</u> Expenditure has been incurred towards testing and measuring equipment like cable identifier, route tracer, earth tester, megger, clip on meters and instruments for field force mobile application.
- (d) Meter Management: The Commission had approved capital expenditure pertaining to Metering of Rs. 30.91 Crore. The actual expenditure incurred was lower based on actual requirement of quantum of three phase and single-phase meters.
- (e) Other Dept.: The Commission had approved capital expenditure pertaining to Other Dept. works of Rs. 41.90 Crore. The major variation is due to ongoing work of new customer care center at locations such as Amraiwadi, Gandhinagar, Narol and Odhav. The actual expenditure incurred was Rs.7.34 Crore towards:
 - Procurement of GIS hardware and software
 - Procurement of distribution transformer and switchgear testing equipment
 - Procurement of MRI, Clip-on meter, document scanner
 - Storage facility at PSC
 - Customer Services Plugpoints
 - Miscellaneous civil works, vehicle, etc.



- (f) Power Supply Centre (PSC): The Commission had approved capital expenditure pertaining to PSC of Rs.114.22 Crore. In this regard, the Petitioner submits that the work for implementation of PSC at different locations across Ahmedabad supply area initiated in FY 2017-18. During FY 2021-22, the Petitioner has made substantial progress and capex of Rs. 91.98 Crore has been incurred mainly at Naranpura, Amraiwadi, Odhav, Narol and Gandhinagar.
- (g) <u>Miscellaneous:</u> The Petitioner has incurred need based capital expenditure of Rs.1.21 Crore under the head of miscellaneous.
- (h) <u>IT & related expenditure:</u> Majority CAPEX is towards IT infrastructure such as hardware and software.

The Petitioner has further submitted the details of capitalization, which is tabulated as below;

Capitalization for Ahmedabad Supply Area in FY 2021-22 (Rs. Crore)

Particulars	Order	Claimed by Petitioner
Opening GFA	7264.40	6997.47
Addition to GFA	893.02	734.46
Deletion to GFA	-	59.32
Closing GFA	8157.42	7672.62
Net Capitalisation	605.63	605.64

Commission's analysis:

The Petitioner has claimed CAPEX of Rs. 980.49 Crore in truing up for FY 2021-22, against CAPEX of Rs.1585.34 Crore approved in Order for case No. 1926 of 2021 dtd. 31.03.2021.

The Commission has observed that according to the audited annual accounts for FY 2021-22, the CAPEX is at Rs. 887.76 Crore as per Note 6 of the Audited accounts under head "Addition during the year". The Petitioner has furnished the details of project-wise breakup of actual capitalization of Rs. 734.46 Crore with details of Opening CWIP as on 1st April, 2021, CAPEX during the year and Closing CWIP as on 31st March, 2022 in form 4.3 of the petition.



The Commission opines that in order to meet the system demand and to provide 24x7 uninterrupted reliable quality power supply, necessary augmentation and upgradation of EHV / HV / LV network is required. TPL-D had submitted the CAPEX plan for the MYT period and accordingly CAPEX and capitalization is being undertaken and it is approved based on the yearly progress.

The Commission sought for additional information regarding difference in the CAPEX during the FY 2021-22 and capitalization against the approval of the Commission in Order and along with reason for variation. In this regard, the Petitioner has furnished the details along with the reasons for variation, which is depicted as below;

Table 4.15 Approved CAPEX and Capitalization for FY 2021-22 (Rs. Crore)

Project Title	Capex proposed for FY 2021-22 in ARR petition	Capex approved for FY 2021-22 in ARR order	Capex claimed and approved in truing up for FY 2021-22	Capitalisation proposed for FY 2021-22 in ARR petition	Capitalisation approved for FY 2021-22 in ARR order	Capitalisation claimed in truing up for FY 2021-22	Difference in approved & actual capitalisation for FY 2021-22
Α	В	С	D	Е	F	G	H=(F-G)
EHV							
Bulk Supply Points	743.25	743.25	283.33	608.62	418.67	21.36	397.31
EHV Lines	2.23	2.23	203.33	5.00	1.26	21.30	397.31
EHV SS Projects	153.51	153.51	91.29	150.54	86.47	117.45	-30.98
33 kV SS Projects	66.47	66.47	45.83	55.97	37.44	50.48	-13.04
Renovation and Replacement	2.77	2.77	6.32	2.77	1.56	6.15	-4.59
Safety	18.16	18.16	12.50	40.99	10.23	11.91	-1.68
Support Infrastructure	10.55	10.55	1.93	10.55	5.94	1.94	4
Automation	0.70	0.70	0.87	0.70	0.39	0.57	-0.18
Total EHV	997.65	997.65	442.07	875.13	561.97	209.88	352.09
HT							0
11kV Normal Load Growth	135.50	135.50	150.06	135.50	76.33	139.04	-62.71
Reliability, Renovation & Modernisation	57.08	57.08	66.37	57.08	32.15	68.07	-35.92
Safety	27.79	27.79	20.56	27.79	15.65	21.10	-5.45
Supporting Infrastructure	0.80	0.80	0.83	0.80	0.45	1.39	-0.94
Total HT	221.17	221.17	237.83	221.17	124.59	229.60	-105.01
LT							0
Normal Load Growth	89.07	89.07	101.53	89.07	50.17	105.32	-55.15
Reliability, Renovation & Replacement	26.49	26.49	37.44	26.49	14.92	35.68	-20.76
Safety	47.87	47.87	37.94	47.87	26.96	39.69	-12.73
Supporting Infrastructure	1.20	1.20	0.67	1.20	0.68	0.67	0.01
Total LT	164.63	164.63	177.58	164.63	92.73	181.36	-88.63
Meters	30.91	30.91	17.11	30.91	17.41	17.62	-0.21
CS	8.17	8.17		8.17	4.60		4.6
Stores	7.14	7.14		7.14	4.02		4.02
GIS	0.80	0.80		0.80	0.45		0.45



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

Project Title	Capex proposed for FY 2021-22 in ARR petition	Capex approved for FY 2021-22 in ARR order	Capex claimed and approved in truing up for FY 2021-22	Capitalisation proposed for FY 2021-22 in ARR petition	Capitalisation approved for FY 2021-22 in ARR order	Capitalisation claimed in truing up for FY 2021-22	Difference in approved & actual capitalisation for FY 2021-22
QA/QC	1.09	1.09		1.09	0.61		0.61
RPRC	0.08	0.08		0.08	0.04		0.04
Safety	0.11	0.11		0.11	0.06		0.06
IT & related expenditure	14.87	14.87	6.58	14.87	8.37	6.54	1.83
PSC	114.22	114.22	91.98	130.50	64.34	79.01	-14.67
Miscellaneous	0.78	0.78	7.34	0.78	0.44	10.46	-10.02
Grand Total	1585.34	1,585.34	980.49	1,479.11	893.02	734.46	158.56

From the said details, it is observed that the major deviation in the capital expenditure is on account of deviation in EHV works. Against approved capital expenditure of Rs.997.65 Crore for EHV works (Bulk Supply Points) in the order, the Petitioner has incurred capital expenditure of Rs.442.07 Crore only and the major CAPEX towards 220 kV supply points at New Pirana, Gandhinagar, Thaltej and Acher was made, which were deferred due to delay in permission/approval by various authorities.

The major reasons for the deviation in capex between the actuals and approved in the order are below:

<u>Bulk Supply Points</u> - Looking to the long-term power requirement of Ahmedabad and Gandhinagar license areas, TPL-D had proposed to establish 220 kV substations at Thaltej, Acher, and Gandhinagar during the MTR exercise of 3rd Control Period. Based on the approvals, work has been initiated on the supply points from FY 2019- 20. Additionally, work for Substation at GOTA has also been initiated. Details for these projects are furnished hereunder:

(1) 220 kV Supply Point at Acher, Sabarmati: At present AMGEN is connected through 132 kV D/C line with GETCO Ranasan Substation with loop-in-loop-out at GETCO Chandkheda and GETCO Sabarmati Substations. In the event of any outage of generation or GETCO transmission line, there is requirement for necessary contingency. Also, there is requirement of Bulk Supply point for meeting the system load growth. Hence, TPL-D has proposed to enhance the import capacity of



Sabarmati area by establishing a 220kV supply point at Acher, near Sabarmati Area. This 220kV supply point shall be connected to GETCO 220 kV Ranasan substation through 220 kV Multi Circuit EHV line and cable. The substation shall have 220 kV and 132 kV GIS switchgears along with bays and other electrical equipment.

During FY 2021-22, the Petitioner has incurred capex of Rs. 115.36 Crore mainly towards land for setting up the bulk supply point, 220 kV Multi circuit line, 220 kV cable and bays. It may kindly be noted that though the Petitioner has encountered certain impediments in terms of Right-of-Way litigations and local authorities approval, the project is expected to commission on time during FY 23-24.

(2) 220 kV Supply Point at Thaltej: The western part of the Ahmedabad city is witnessing fast development of residential/commercial units and there is a vertical growth. By establishing supply points in the western part of the city, TPL-D will be able to meet the future long-term demand.

Therefore, looking to the long-term power requirement of Ahmedabad City and the loading condition of existing supply points, it is proposed to establish 220 kV supply point at Thaltej.

This 220kV supply point shall be connected to GETCO's 400 kV Charal Substation through 220 kV Multi Circuit EHV lines. Further, part of the existing 132 kV D/C line shall be modified to Multi Circuit for 220 kV and 132 kV line and cable.

During FY 2021-22, the Petitioner has incurred capex of Rs. 79.47 Crore mainly towards 220 kV Multi circuit line and cable. It may kindly be noted that work of Thaltej supply point involved Right-of-Way approval from local authorities including National Highway authority. However, the project is expected to commission on time during FY 23-24.

(3) 220 kV Supply Point at Gandhinagar: Gandhinagar is a capital city of Gujarat and is being radially fed by 132 kV Double circuit EHV line from Sabarmati Power station. In the event of any outage at Sabarmati power station, only 22 MW standby supply is available to supply to important installations like Sachivalaya, Rajbhavan, Data Centre



and other Government establishments.

Looking to the spurt of developmental activities in Gandhinagar including various infrastructure projects and to ensure uninterrupted supply to the capital city, it is essential to upgrade the existing 66 kV supply point to 220 kV and enhance the import capacity at Gandhinagar.

Based on GETCO requirement, TPL was required to purchase land to carry out Loop-in-Loop-out at 220 kV GETCO's Soja-TPS Gandhinagar lines and establish the proposed 220/132 kV supply point. In turn during FY 2021-22, TPL has incurred Rs. 38.19 Crore towards 220/132 kV substation, transformer plinth and 132 kV network. The project is scheduled to commission on time during FY 22-23.

<u>EHV Substations</u>- The system demand of Ahmedabad & Gandhinagar city is increasing year on year. In order to cater to these requirements, it is necessary to undertake capacity augmentations.

During the 3rd MYT control period, the Commission has approved to establish substations at strategic locations to meet future requirements. Accordingly, Petitioner proposed to establish 132 kV substation at Lambha, Riverfront, and SG Highway to cater to the demand of nearby areas. Further, additional transformers of 132/33 kV and 132/11 kV are also required to be installed to cater to the load demand of nearby areas and to feed the upcoming 33 kV/11 kV substations respectively. During FY 2021-22 TPL has incurred capex of Rs. 91.29 Crore.

<u>Power Supply Centers</u> - During MYT exercise of 3rd Control Period, TPL proposed capital expenditure towards upgradation of existing zonal offices to provide enhanced and improved customer services across Ahmedabad/ Gandhinagar supply area. In turn, various locations have been identified for setting up Power Supply Centers (PSC) keeping in mind customer convenience & efficiency in services. These include Naranpura, Gandhinagar, Amraiwadi, Vinzol, Odhav, Motera, Pirana, and Vasna amongst others.

In this regard, during FY 2021-22, the Hon'ble Commission has approved capex of Rs.



114.22 Crore. Based on availability of land and permissions from local authorities, TPL has incurred capex of Rs. 91.98 Crore in 2021-22 mainly towards establishing Power Supply Centers at Naranpura, Amraiwadi, Odhav, Narol, etc. The work of these PSCs is scheduled to be completed by FY 23-24.

Regarding capitalization, it has submitted that the Commission approved the estimated capitalization on consolidated basis for FY 2021-22.

The Commission has verified from the annual accounts that the Petitioner has incurred capital expenditure of Rs. 887.76 Crore during FY 2021-22. The Commission has considered the opening CWIP at Rs. 596.62 Crore based audited annual accounts for FY 2021-22. The Commission based on the audited annual accounts of FY 2021-22 has considered the opening CWIP, CAPEX and capitalisation during the year and closing CWIP in true up for FY 2021-22 as given in the table below:

Table 4.16: Capital works in progress (CWIP) approved in true up for FY 2021-22 for TPL-D (A) (Rs. Crore)

S. No.	Particulars	Approved in Truing-Up
1	Opening CWIP	596.62
2	Addition during the year	887.76
3	Less: Capitalisation	641.74
4	Closing CWIP (1+2-3)	842.64

The Commission has noted the submissions of the Petitioner regarding the capital expenditure as well as capitalisation of assets. The Commission notes that TPL-D (A) has upgraded and uprated some of the existing sub-stations and lines as well as switchgears.

Moreover, TPL-D (A) has also established and augmented various sub-stations at 33 kV level in different parts of the city near the load centers, which has led to reduction in the Distribution losses.

The Commission has verified the energizations of EHV system during FY 2021-22 from the Certificate of energizations issued by the Chief Electrical Inspector and details of loading of the newly created EHV network which substantiates that the assets created



through CAPEX have been put to service, which have been submitted by the Petitioner in its additional submission. On further query regarding capitalization of assets having CEI certificate prior to FY 2021-22, it has stated that TPL is capitalizing assets only upon receipt of CEI certificate and after completion of all consumer side compliances. It has further stated that these assets were capitalized only in FY 21-22 and there is no duplication in terms of capitalization. It has further submitted the details of energisation of assets, where the certificate date is prior to FY 21-22.

It has been observed that the Petitioner has claimed capitalisation of Rs.734.46 Crore in truing up for FY 2021-22, against capitalisation of Rs.893.02 Crore approved by the Commission in the order dated 31.03.2021. It has been further observed that there is a significant variation in the value of Opening GFA in the Annual Accounts and petition. TPL-D (A) clarified that the Fixed Asset Schedule in Annual Accounts is on NFA basis as per Ind-AS. However, TPL-D (A) has submitted fixed asset schedule in the petition on GFA basis as per the GERC (MYT) Regulations, 2016.

The Commission has approved closing GFA at Rs. 6997.48 Crore in true up for FY 2020-21 and the same is considered as opening GFA for FY 2021-22.

The Commission has observed that according to the audited annual accounts for FY 2021-22, the capitalisation is at Rs. 734.46 Crore. The Petitioner has furnished details of asset wise capitalization in Form 4.2 which is depicted in the Table below:

Table 4.17: Break up of capitalised assets for FY 2021-22 (Rs. Crore)

S. No.	Project Code	Actual Capitalisation
1	EHV	
а	Bulk Supply Points /EHV Lines	21.36
b	EHV SS Projects	117.45
С	33 kV SS Projects	50.48
d	Renovation and Replacement	6.15
е	Safety	11.91
f	Support Infrastructure	1.94
g	Automation	0.57



S. No.	Project Code	Actual Capitalisation
	Total EHV	209.88
2	нт	
а	Normal Load Growth	139.04
b	Reliability, Renovation & Modernization	68.07
С	Safety	21.10
d	Supporting Infrastructure	1.39
	Total HT	229.60
3	LT	
а	Normal Load Growth	105.32
b	Reliability, Renovation & Replacement	35.68
С	Safety	39.69
d	Supporting Infrastructure	0.67
	Total LT	181.36
4	Meters	
а	Normal Load Growth	16.83
b	Supporting Infrastructure	0.79
	Total Meters	17.62
5	PSC	79.01
6	IT	6.54
7	Other Departments	10.46
	Grand Total	734.46

It has been observed that TPL-D (A) has de-capitalised assets to the extent of Rs. 59.32 Crore during FY 2021-22. However, it has been found there is deductions of Rs. 35.74 Crore as per (Note 4.1) of the audited annual accounts for FY 2021-22 from GFA. On query upon this, the Petitioner has submitted that the Fixed Asset Schedule of Annual Accounts is on NFA basis as per IND AS. However, it has shown Fixed asset schedule on GFA basis as per GERC MYT Regulations in the Petition. Therefore, difference in deduction as shown in Petition vis-å-vis account is on account of accumulated depreciation on such deducted assets. Hence, the Commission considers de-capitalised assets at Rs. 59.32 Crore and accordingly adjustments made to GFA in truing up for FY 2021-22.

The Commission, in view of the above has considered the CAPEX, capitalisation, asset



deductions and closing GFA in true up for FY 2021-22 as given in the table below:

Table 4.18: Funding of capitalization approved for TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Claimed by Petitioner	Approved by Commission
Opening GFA	6997.47	6997.48
Addition to GFA	734.46	734.46
Deletion to GFA	59.32	59.32
Closing GFA	7672.62	7672.62
Less: SLC Addition	128.82	128.82
Balance Capitalisation	605.64	605.63

The Commission approves the capitalization and funding as shown in the above Table in the truing up for FY 2021-22.

4.7.3. Depreciation

Petitioner's submission:

TPL-D (A) has claimed a sum of Rs. 265.87 Crore towards depreciation in the truing up for FY 2021-22 as against Rs. 281.44 Crore approved in the Order for FY 2021-22 as shown in the Table below:

Table 4.19: Depreciation claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Claimed by Petitioner
Depreciation	281.44	265.87

TPL-D (A) has submitted that the depreciation rates, as per CERC (Terms and Conditions of Tariff) Regulations, 2004, are applied on the Opening GFA of FY 2009-10 and for addition of assets from 1st April, 2009 onwards, the depreciation has been computed at the rates specified in the GERC Regulations. The Petitioner has submitted that depreciation is an uncontrollable item.



Commission's analysis:

The Commission has considered the opening balance of GFA for FY 2021-22 equal to the closing balance of GFA for FY 2020-21 approved by the Commission. The details of opening GFA as on 1st April, 2021, addition to and deduction from the Gross Block during FY 2021-22 are elaborated in the previous sections.

The Commission has verified the depreciation from the annual accounts for FY 2021-22 and observed that depreciation as per annual accounts is Rs. 324.74 Crore. However, the Petitioner has claimed depreciation of Rs. 265.87 Crore in truing up for FY 2021-22. On query from the Commission, it has submitted that the depreciation has been claimed in accordance with the applicable regulations. The fixed assets schedule of annual accounts is on net fixed assets basis as per Ind. AS. Accordingly, it has deducted an amount of Rs. 58.73 Crore on assets funded through service line contribution and Rs. 0.13 Crore towards depreciation pertaining to IND AS 116.

The Commission, accordingly, approves the depreciation of Rs. 265.87 Crore for FY 2021-22. The deviation in depreciation as compared to approved in Order dtd. 31.03.2021 is considered as uncontrollable, as the depreciation is dependent on capitalisation. The Commission, accordingly, approves the gains/(losses) on account of depreciation for FY 2020-21, as tabulated below:

The Commission, accordingly, approves the depreciation of Rs. 265.87 Crore in the truing up for FY 2021-22 as given below.

Particulars	Approved in Order	Approved in Truing-Up	Deviation	Gains/(Losses) due to Uncontrollable
Depreciation	281.44	265.87	15.57	15.57

4.7.4. Interest and Finance Charges

Petitioner's submission:

TPL-D(A) has claimed a sum of Rs. 115.10 Crore towards actual interest expenses in



the truing up for FY 2021-22 as detailed in the Table below as against Rs.168.50 Crore approved in the Order dated 31.03.2021. In addition, TPL-D (A) has claimed an amount of Rs. 1.94 Crore towards other borrowing costs.

Table 4.20: Interest Expense claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Claimed by Petitioner
Opening Balance	1726.36	1,506.91
Less; reduction of normative loan due to retirement	-	3.66
Addition of Loan	573.11	423.95
Repayment during year	281.44	265.87
Closing Balance	2,018.03	1,661.32
Average Loan	1,872.20	1,584.12
Weighted average rate of interest (%)	9.00%	7.27%
Interest Expenses	168.50	115.10
Other Borrowing Costs	-	1.94

The Petitioner submits that the MYT Regulations, 2016 provides for the calculation of

interest expenses on normative basis considering the amount of depreciation of assets as the amount of repayment. The Petitioner has considered the interest expenses as per the MYT Regulations, 2016 on normative loans. Reduction of normative loan due to deduction in GFA is derived at Rs. 3.66 Crore after considering depreciation on account of deduction of Rs. 14.28 Crore and reduction in equity of Rs. 17.80 Crore. The Petitioner has calculated the interest expenses by applying Weighted Average Rate of interest of the actual loan portfolio of the Petitioner during the year on the loan component while repayment has been considered equal to the depreciation of the assets for the year.

Commission's analysis:

The Commission has considered the opening normative loan at Rs.1506.91 Crore for FY 2021-22 based the closing normative loan approved in true up for FY 2020-21 in Order dated 31.03.2022.

Addition to loan during the year FY 2021-22 is considered at Rs.423.94 Crore as approved in earlier sections in accordance with the GERC MYT regulations 2016. The



repayment is considered equivalent to depreciation as approved in the section of depreciation. The GERC (MYT) Regulations, 2016 provides for computation of interest on loan on normative basis on the opening balance of loan brought forward from the previous year's closing balance, capitalisation and funding approved during the year. Further, the Petitioner has reduced normative loan due to deduction in GFA to the extent of Rs. 3.66 Crore after considering depreciation on account of deduction of Rs. 14.28 Crore.

As per first proviso of the Regulation 38.5 of the GERC (MYT) Regulations, 2016, at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the year applicable to the Distribution Licensee shall be considered as the rate of interest.

Accordingly, the Commission sought information such as the actual loan portfolio and computation of weighted average rate of interest, which the Petitioner submitted vide additional submission. The Commission has considered the weighted average rate of interest at 7.27% equal to the interest rate claimed by the Petitioner for FY 2021-22.

The Commission sought information on details of other borrowing cost, which Petitioner has submitted that the other borrowing cost of Rs.1.94 Crore which includes Bank Charges levied for issuing Bank guarantee and letter of credit mainly for power purchase. The Commission accordingly approves the other borrowing cost of Rs.1.94 Crore based on the annual accounts. By considering above, the Commission has computed the Interest & Finance Charges for FY 2021-22, which is tabulated as below;

Table 4.21: Interest Expenses approved in truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Approved by Commission
Opening Balance	1726.36	1,506.91
Less; reduction of normative loan due to retirement	-	3.66
Addition of Loan	573.11	423.95
Repayment during year	281.44	265.87
Closing Balance	2,018.03	1,661.32



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

Particulars	Approved in Order	Approved by Commission
Average Loan	1,872.20	1,584.12
Weighted average rate of interest (%)	9.00%	7.27%
Interest Expenses	168.50	115.10
Other Borrowing Costs	-	1.94
Total Interest & Finance Expenses	168.50	117.04

The Commission, accordingly, approves the interest and finance charges at Rs.117.04 Crore in the truing up for FY 2021-22.

The Commission also approves the Gains/(Losses) on account of interest and finance charges in the truing up for FY 2021-22, as per the GERC (MYT) Regulations, 2016 as detailed in the Table below:

Table 4.22: Interest Expenses and Gains/ (Losses) approved by the Commission for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Approved in Truing-Up	Deviation	Gains/(Losses) due to
				Uncontrollable
Interest & Finance Charges	168.50	117.04	51.46	51.46

Interest on Security Deposit

Petitioner's Submission:

The Petitioner has claimed Rs. 36.13 Crore towards interest on security deposit in truing-up for FY 2021-22 as against Rs. 41.50 Crore approved in the Order. The Commission in the Order had approved the interest on security deposit for the Petitioner considering 4.65% interest rate on the average estimated balance of security deposit for FY 2021-22.

The Petitioner has submitted the actual interest expense on security deposit considering the rate of interest of 4.25% paid to consumers based on Bank Rate is submitted in the Table below:



Table 4.23 Interest on Security Deposit claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Claimed by Petitioner
Interest Rate	4.65%	4.25%
Interest on Security Deposit	41.50	36.13

The Petitioner has further submitted that the variation in security deposit amount and the variation in interest rate are uncontrollable. Hence, the Petitioner has requested the Commission to treat the variation in interest on security deposit as compared to approved expenses as uncontrollable.

Commission's Analysis:

The Commission has verified the actual interest on security deposit and found the same to be as per the annual accounts submitted with the petition. Thus, the Commission, accordingly, approves the interest on security deposit at Rs. 36.13 Crore for FY 2021-22.

The deviation of Rs. 5.37 Crore is considered as gain on account of uncontrollable factor as detailed in the Table below:

Table 4.24 Interest on Security Deposit and Gains/Losses approved for FY 2021-22 (Rs. Crore)

Particulars	Approved in the Order	Approved in Truing- Up	Deviation +(-)	Gains/(Losses) due to Uncontrollable Factors
Interest on Security Deposit	41.50	36.13	5.37	5.37

4.7.5. Return on Equity

Petitioner's submission:

TPL-D (A) has claimed a sum of Rs. 295.89 Crore towards Return on Equity @ 14% in the truing up for FY 2021-22 as against Rs.314.12 Crore approved in the Order dated 31.03.2021 as detailed in the Table below:



Table 4.25: Return on Equity claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Claimed By Petitioner
Opening Equity	2,120.93	2,031.55
Equity Addition	245.62	181.69
Reduction in equity on account of retirement	-	17.80
Closing Equity	2,366.55	2,195.45
Return on Equity at beginning of year	296.93	284.42
Return on Equity addition during year	17.19	11.47
Total Return on Equity	314.12	295.89

TPL-D (A) has submitted that the closing balance of equity has been arrived at considering additional equity of 30% of the capitalisation during the year. The return on equity has been computed by applying a rate of 14% on the average of opening balance & closing balance of equity.

The Petitioner has requested the Commission to consider the variation in RoE as uncontrollable and allow the same for the purpose of truing-up.

Commission's analysis:

The closing equity as on 31st March, 2021 approved in the Truing up order dated 31st March 2022 has been considered as the opening equity for FY 2021-22. During the year FY 2021-22, the net asset addition to GFA is at Rs. 605.63 Crore and the equity at 30% works out to Rs. 181.69 Crore. Further during the year deletion from GFA is at Rs. 59.32 Crore. Accordingly, reduction in equity is considered at Rs. 17.80 Crore being 30% of the asset reduction. Thus, net equity addition is considered at Rs.163.89 Crore for FY 2021-22 in truing up.

The rate of return is considered at 14% as per the GERC (MYT) Regulations, 2016 to work out the Return on Equity as shown in the Table below:

Table 4.26: Return on Equity approved by the Commission for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Approved in True-up
Opening Equity	2,120.93	2,031.55
Equity Addition	245.62	181.69



Particulars	Approved in Order	Approved in True-up
Reduction in equity on account of retirement	-	17.80
Closing Equity	2,366.55	2,195.45
Return on Equity at beginning of year	296.93	284.42
Return on Equity addition during year	17.19	11.47
Total Return on Equity	314.12	295.89

The Commission, accordingly, approves the Return on Equity at Rs. 295.89 Crore in the truing up for FY 2021-22.

The Return on Equity depends on the amount of capitalization during the year and the debt to equity ratio considered during the Financial Year and these parameters are uncontrollable in nature. The variance in the amount of Return on Equity is therefore treated as an uncontrollable item.

The Commission, accordingly, approves the gains/(losses) on account of Return on Equity in the truing up for FY 2021-22 as detailed below.

Table 4.27: Return on Equity and Gains/Losses approved in truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Approved in Truing-Up	Deviation	Gains/ (Losses) due to Uncontrollable
Return on Equity	314.12	295.89	18.23	18.23

4.7.6. Income Tax

Petitioner's submission:

While passing the MTR Order, the Commission approved Rs.80.64 Crore as income tax as per the actuals of FY 2019-20 for FY 2021-22, the Petitioner has claimed the Income Tax based on the actual tax paid in proportion to the PBT of TPL-D (A). Hence, the total amount claimed under the head of income-tax is Rs. 46.47 Crore.



Table 4.28: Income tax claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Claimed by Petitioner
Income Tax	80.64	46.47

The Petitioner has requested the Commission to consider the variation in Income Tax as uncontrollable and allow the same for truing up.

Commission's analysis:

The Commission had asked TPL to furnish the details of segregation of income tax paid by TPL in respect of TPL-D (A) along with copies of challans of income tax paid. In its reply, TPL-D (A) stated that being a single corporate entity, income tax is paid for the company as a whole and submitted copies of challans of income tax paid for the year. The Petitioner has computed the Income Tax by applying the ratio of PBT and after adjustment of tax credit.

The Commission has verified the PBT figures from the annual accounts for FY 2021-22. The Petitioner has shown a PBT of Rs. 407.42 Crore. The PBT as per standalone financial statement of TPL is Rs. 1817.41 Crore and the total tax paid by the Company as a whole is Rs. 207.30 Crore. It is observed that during FY 2021-22, the Petitioner has paid Minimum Alternate Tax (MAT) of 17.47%, though the effective tax rate works out to be 11.41%. Applying the effective tax rate of 11.41% on the PBT of TPL-D (A), the income tax for TPL-D (A) works out to be Rs. 46.47 Crore.

On query from the Commission regarding any refund of income tax of past years have been received in FY 21-22, in this regard, it has submitted that the refund of Rs. 0.34 Crore pertaining to FY 2016-17. It has further submitted that the Commission has allowed recovery of Income Tax by applying MAT rate on PBT during true-up of FY 2016-17. Hence, it has not considered in FY 2021-22 Tax claim. Further query on this, it has stated that the Commission has allowed the MAT rate of instead of claim of effective Tax rate for FY 2016-17. it has further submitted that there is no change in the income tax approved for FY 2016-17 even after considering refund of Rs. 0.34



Crore received for FY 2016-17.

It is learnt that the TPL as whole has received an Income Tax refund of Rs. 0.34 Crore pertaining to FY 2016-17. It is fact that TPL a single corporate entity, income tax is paid for the company as a whole and submitted copies of challans of income tax paid for the year. It is also fact that the Petitioner has computed the Income Tax by applying the ratio of PBT. However, the Commission first verified the copies of challans of income tax paid for the truing up year TPL as a whole and allowed the income tax based on the MAT Rate or effective Tax Rate, which is lower. However, it has stated that TPL as whole has received an Income Tax refund of Rs. 0.34 Crore pertaining to FY 2016-17. Hence, it is appropriate to adjust this amount between the regulated business as it received in this true up year. On the perusal of the Commission's Order in Case No. 1696/2018 dtd. 31.03.2018, the Commission has observed following thing;

"The share of income tax for TPL-D(A) in the total tax TPL (G), TPL (A), TPL (S) and TPL(Dahej) of Rs.112.73 Crore (net of tax credit) as computed above works out to Rs. 6.92 Crore considering PBT net of Remeasurement of Defined Benefit Plans and tax credit."

Accordingly, the Commission has apportioned between TPL (G), TPL (A), TPL (S) and TPL(Dahej) of Rs. 0.34 Crore based on the ratio as approved in the Truing up exercise of FY 2016-17, which is tabulated as below:

Table 4.29: Utility wise breakup of Tax credit received for FY 2016-17

in Rs. Crore	TPL-G (APP)	TPL-D (A)	TPL-D (S)	TPL-D (D)	TPL
PBT	34.21	327.04	195.81	(1.70)	583.94
Actual tax paid					129.89
Income-tax Claimed	7.61	72.75	43.56	-	
Income -tax approved	6.92	66.18	39.62		112.73
Ratio	6.14%	58.71%	35.15%		
Refund amount	0.02	0.20	0.12		0.34

From the above table, it has been observed that the share w.r.t. TPL-D (A) is worked



out as Rs. 0.20 Crore towards refund of Rs. 0.34 Crore pertaining to FY 2016-17.

The Commission, accordingly, approves the income tax at Rs. 46.27 Crore for truing-up of FY 2021-22. The Commission has treated the income tax as an uncontrollable expense and accordingly, approves the gains/(losses) on account of income tax for FY 2021-22 as tabulated below:

Table 4.30: Income Tax and Gains/Losses approved in the truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Approved in Truing-Up	Deviation	Gains/(Losses) due to Uncontrollable
Income Tax	80.64	46.27	34.37	34.37

4.7.7. Bad Debts Written Off

Petitioner's submission:

The Commission in the order had approved the bad debts of Rs.4.24 Crore for Ahmedabad supply area. The Petitioner has written off bad debts of Rs.4.69 Crore during the year, as shown in the Table below.

Table 4.31: Bad Debts Written-off claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Claimed by petitioner
Bad Debts Written off	4.24	4.69

The GERC (MYT) Regulations, 2016 provides that variation in bad debts written off is to be considered as controllable. Accordingly, the Petitioner has requested to consider the variation in bad debts written off in FY 2021-22 as controllable for sharing of gains/losses in line with the Regulations.

Commission's analysis:

The Petitioner has claimed Rs. 4.69 Crore towards bad debts written off during FY 2021-22 against which the recovery of bad debts made is Rs. 2.46 Crore, as claimed



by the Petitioner under Non-Tariff Income. Therefore, the net bad debt written off (Rs.4.69 Crore minus Rs. 2.46 Crore) is Rs. 2.23 Crore. The Commission has verified the bad debt written off (net) from the Annual Accounts for FY 2021-22. The Commission, accordingly, approves the bad debts written off at Rs. 4.69 Crore for FY 2021-22. The deviation of Rs. 0.45 Crore in bad debts is considered as controllable factor. The Commission, accordingly, approves the gains/losses on account of bad debts for FY 2021-22 as detailed below:

Table 4.32: Bad Debts Written off and Gains/Losses approved for truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Approved in Truing-Up	Deviation	Gains/(Losses) due to Controllable
Bad Debts Written off	4.24	4.69	(0.45)	(0.45)

4.7.8. Contingency Reserve

Petitioner's submission:

The Commission had allowed contingency reserve of Rs. 0.60 Crore for meeting the requirement of unexpected emergent circumstances. Accordingly, the Petitioner has considered the approved values and prayed to the Commission to allow the same for truing-up of FY 2021-22.

Commission's Analysis:

The proposed contingency reserve is consistent with the GERC (MYT) Regulations, 2016. Accordingly, the Commission approves Rs. 0.60 Crore towards contingency reserve for FY 2021-22.

Table 4.33: Gains/ (Losses) for contingency reserves approved for FY 2021-22 (Rs. Cr)

Particulars	Approved in Order	Approved in Truing-Up	Deviation	Gains/(Losses) due to Controllable
Contingency Reserves	0.60	0.60	-	-

The Commission, accordingly, approves the contingency reserve at Rs. 0.60 Crore in the truing up for FY 2021-22.



4.7.9. Interest on Working Capital

Petitioner's submission:

The working capital requirement is arrived at as per the GERC (MYT) Regulations, 2016. As the working capital requirement is negative, the Petitioner has not claimed any interest on working capital.

Table 4.34: Interest on Working Capital claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Claimed By Petitioner
O&M Expenses for 1 Month	30.22	30.13
1% of GFA for maintenance spares	72.64	69.97
Receivables for 1 month	427.80	471.00
Less: Security Deposit	892.55	890.27
Working Capital Requirement	-	-
Rate of Interest (%)	10.25%	9.50%
Interest on Working Capital	-	-

The Petitioner has submitted that the variation in working capital requirement is primarily on account of variation in actual O&M expenses and receivables. Further, there is a variation in the interest rate applicable to working capital requirement. Accordingly, the Petitioner has requested the Commission to consider the variation in interest on working capital as uncontrollable.

Commission's analysis:

The Commission has computed the working capital requirement of TPL-D (A) as specified in Regulation 40.4 and Regulation 40.5 of the GERC (MYT) Regulations 2016 read in conjunction with the GERC (MYT) (First Amendment) Regulations, 2016 after considering the security deposit amount available during the year.

TPL-D (A) has considered the working capital interest rate @ 9.50% per annum, being the weighted average 1-year MCLR prevailing during FY 2021-22 plus 250 basis points.

The regulations (read with amendment notification No.7 of 2016 dated 02.12.2016) specify the rate of interest to be allowed shall be the weighted average 1-year SBI MCLR plus 250 basis points (i.e.2.50%). The Commission has verified the weighted



average 1-year MCLR during FY 2021-22 from the State Bank of India website which worked out to 7.00% (for 1-year tenure effective throughout the year). Accordingly, the rate of interest for computation of interest on working capital works out to 9.50% (7.00%+2.50%) and the same is adopted in truing up for FY 2021-22.

The working capital requirement and the interest on working capital is as shown in the Table below:

Table 4.35: Interest on Working Capital approved by the Commission for FY 2021-22 (Rs. Crore)

Particulars	Approved In Order	Approved In True-up
O&M Expenses for 1 Month	30.22	30.14
1% of GFA for maintenance spares	72.64	69.97
Receivables for 1 month	427.80	471.00
Less: Security Deposit	892.55	892.55
Working Capital Requirement	-	-
Rate of Interest (%)	10.25%	9.50%
Interest on Working Capital	-	-

The Commission, accordingly, approves the interest on working capital as NIL in the truing up for FY 2021-22.

4.7.10. Non-Tariff Income

Petitioner's submission:

The Commission had approved Non-Tariff Income of Rs.34.79 Crore for FY 2021-22 in the Order dated 31.03.2021. The actual Non-Tariff Income considered for truing up is Rs.55.15 Crore.

In the previous Control Period, the Petitioner had considered the treatment towards income and expense of bad debts on similar lines as per the Hon'ble APTEL Judgment, wherein, the variation in recovery of bad debts was considered as controllable.

However, the GERC (MYT) Regulations, 2016 provides that variation in bad debts written off is to be considered as controllable, while variation in bad debts recovery is to be considered as uncontrollable. Therefore, the Petitioner has considered the



entire variation in bad debts recovery in FY 2021-22 as uncontrollable for sharing of gains/losses in line with the Regulations. However, the Petitioner has requested the Commission to revisit the provision related to bad debts recovery and expenses.

Table 4.36:Non-Tariff Income claimed by TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Claimed by Petitioner
Non-Tariff Income	34.79	55.15

The Petitioner has submitted that the variation in non-tariff income as detailed above has been considered as uncontrollable. Accordingly, it has requested the Commission to allow above variation in Non-Tariff Income as uncontrollable for the purpose of truing up.

Commission's analysis:

The Non-Tariff Income is specified in Regulations 89 and 97 of the GERC (MYT) Regulations, 2016, which includes various items such as income from sale of scrap, income from statutory investment, interest on advances to supplier/contractor, etc. The Commission observes that the Non-Tariff Income claimed by the Petitioner for FY 2021-22 is Rs.55.15 Crore. The Non-Tariff Income as per the Annual Accounts is Rs.133.71 Crore. The Petitioner has reduced the Insurance Claim Receipt (Rs.0.06 Crore), Amortisation of Deferred Revenue (Rs.58.73 Crore) and Delayed payment surcharge (Rs.14.10 Crore) and Incentive related Surya Gujarat Solar roof top Scheme amounting to Rs. 8.13 Crore. The Petitioner has included recovery from bad debts of Rs.2.46 Crore in the Non-Tariff Income to arrive at claimed figure of Rs.55.15 Crore.

On query regarding non-consideration of Incentive related Surya Gujarat Solar roof top Scheme amounting to Rs. 8.13 Crore, the Petitioner has submitted that as per the clause 5.2.1, 5.2.2 and 5.2.7 of the MNRE Guidelines dated 20.08.2019 on "Implementation of Phase — I I of Grid Connected Rooftop Solar Programme for achieving 40 GW capacity from Rooftop Solar by the year 2022", the Petitioner is required to treat incentive and expense separately from tariff exercise. It has further



furnished the copy of the MNRE guideline dated 20.08.2019. on perusal of the aforesaid policy, it has observed that "as the incentive are proposed for various reasons mentioned in 5.2.1 and 5.2.2, the above incentives proposed may not be a part of tariff of Tariff Determination & Tariff Rationalization process of SERC/JERC." Accordingly, the Commission has not considered an amount of Rs. 8.13 Crore towards Incentive related Surya Gujarat Solar roof top Scheme in FY 2021-22.

Further, as discussed in the section of O&M expenses of this Order, Insurance Claim Receipt is part of NTI and accordingly, an amount of Rs.0.06 Crore has been considered towards this head.

The Commission, accordingly, approves the Non-Tariff Income of Rs.55.21 Crore for FY 2021-22.

The Commission, accordingly, approves the gains/(losses) on account of Non- Tariff Income in the truing up for FY 2021-22 as detailed below:

Table 4.37: Non-Tariff Income and Gains/(Losses) approved for truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Order	Approved in Truing-Up	Deviation	Gains/(Losses) due to Uncontrollable
Non-Tariff Income	34.79	55.21	(20.42)	(20.42)

4.7.11. Revenue from Sale of Power

Petitioner's submission:

The Petitioner has submitted the revenue from sale of power as Rs.5652.05 Crore as the revenue from sale of power in the truing up for FY 2021-22.

Commission's analysis:

The Commission has observed that the revenue from sale of power is at Rs.5799.31 Crore as per the annual accounts for FY 2021-22. However, the Petitioner in Form 10 has depicted Rs.5652.05 Crore and accordingly the same is considered in the petition for truing up for FY 2021-22. It was stated that provision of Rs.147.26 Crore is not



considered in revenue from sale of electricity.

The Commission has addressed the Petitioner to explain why it is not considered under revenue for sale of energy. The Petitioner has submitted that revenue from sale of electricity considered in petition excludes Rs.147.26 Crore considered on accrual basis in audited accounts (but not billed to the consumers). The petitioner vide additional responses to Data-gaps has submitted that, it has adopted Ind AS 115 (revenue from contracts with customers) w.e.f. 1st April 2018. It has further submitted the details of FPPPA charges (Recoverable vis-à-vis Recovered) for the FY 2021-22 along with the revenue recognized as accrued thereof vide additional submission dated 14.03.2023.

To substantiate this, it has further submitted a certificate of Statutory Auditor certifying that amount of Rs. 147.25 Crore is not recovered from the consumers on account of unrecovered gap/FPPPA charges.

Hence, The Commission has not considered the amount of Rs. 147.25 Crore on account of unrecovered FPPPA charges not being reflected as revenue for FY 2021-22. Accordingly, the Commission has considered the actual recovered revenue of Rs. 5,652.05 Crore from sale of power for the purpose of truing up of FY 2021-22. Thus, the unrecovered FPPPA of the past period is reflected in trued up (Gap)/Surplus of FY 2021-22 and accordingly, the past period unrecovered FPPPA is subsumed in the trued up (Gap)/Surplus of FY 2021-22.

On query regarding subsidy from GOG towards Covid-19 related to waiving off of Fixed charges, It has submitted that it has considered gross revenue from the consumers in their Revenue as waiver of Fixed charges given to the consumers of Non-RGP/LTMD/HT categories was to be reimbursed by the GOG. It has further submitted that the reimbursement was not received during FY 2021-22 towards subsidy related to period during Covid-19 waiving off by GOG.

The Commission in accordance with the GERC (MYT) Regulations, 2016 approves the Revenue from sale of power at Rs. 5652.05 Crore for FY 2021-22 in the truing up purpose.



4.7.12. Gains/Losses under truing up for FY 2021-22

Petitioner's submission:

The Petitioner has submitted that the gains/(losses) on account of uncontrollable factors shall be passed through in tariff as per Regulation 23 and the gains/(losses) on account of controllable factors are shared between the licensee and the consumer in the form of tariff adjustment as per Regulation 24.

The Petitioner has compared the actuals for FY 2021-22 with the approved figures and has segregated the variation as controllable or uncontrollable based on the analysis mentioned hereinabove in the truing up section as given in the table below:

Table 4.38:Controllable & Uncontrollable variations for FY 2021-22 claimed by the Petitioner (Rs. Crore)

S. No	Particulars	Approved In Order	Actual O	ver/ (Under) recovery	Controllable	Uncontrollable
1	Power Purchase Expenses	3,914.72	4,601.02	-686.30	102.82	-789.12
2	Operation & Maintenance Expenses	362.59	361.60	0.99	0.99	0.00
3	Depreciation	281.44	265.87	15.57	-	15.57
4	Interest and Finance Charges	168.50	117.04	51.46	-	51.46
	Interest on Security Deposit	41.50	36.13	5.37		5.37
5	Interest on Working Capital	-	-	-	-	-
6	Bad debts written off	4.24	4.69	-0.45	-0.45	-
7	Contribution to contingency reserves	0.60	0.60	-	-	-
9	Return on Equity Capital	314.12	295.89	18.23	-	18.23
10	Income Tax	80.64	46.47	34.17	-	34.17
	Less: Non-Tariff Income	34.79	55.15	-20.36	-	-20.36
11	Aggregate Revenue Requirement	5,133.56	5,674.17	(540.60)	103.35	(643.96)

Commission's analysis:

The Commission has reviewed the performance of TPL-D (A) under Regulation 22 of the GERC (MYT) Regulations, 2016, for FY 2021-22. The Commission has computed the gains / (losses) for FY 2021-22 based on the truing up for each of the components discussed in the above paragraphs.



The Commission based on the Aggregate Revenue Requirement (ARR) approved in the Order dated 31.03.2021 in Case No. 1926 of 2021, the actuals claimed in truing up and as approved by the Commission in truing up, has computed the Gains/(Losses) in accordance with the GERC (MYT) Regulations, 2016 as given in the Table below:

Table 4.39: ARR approved in respect of TPL-D (A) in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Order	Approved in True-up	Over/ (Under) recovery	Controllable	Uncontrollable
1	Power Purchase Expenses	3,914.72	4,601.02	-686.29	102.82	-789.11
2	Operation & Maintenance Expenses	362.59	361.66	0.93	0.93	0.00
3	Depreciation	281.44	265.87	15.57	-	15.57
4	Interest and Finance Charges	168.50	117.04	51.46	-	51.46
	Interest on Security Deposit	41.50	36.13	5.37		5.37
5	Interest on Working Capital	-	-	-	-	-
6	Bad debts written off	4.24	4.69	-0.45	-0.45	-
7	Contribution to contingency reserves	0.60	0.60	-	-	-
9	Return on Equity Capital	314.12	295.89	18.23	-	18.23
10	Income Tax	80.64	46.27	34.37	-	34.37
	Less: Non-Tariff Income	34.79	55.21	-20.42	-	-20.42
11	Aggregate Revenue Requirement	5,133.56	5,673.95	-540.39	103.30	-643.69

4.7.13. Sharing of Gains / Losses for FY 2021-22

The Commission has shared the gains/losses on account of controllable and uncontrollable factors in accordance with Regulation 23 of the GERC (MYT) Regulations, 2016.

The relevant Regulations are extracted below:

"Regulation 23. Mechanism for pass-through of gains or losses on account of uncontrollable factors

23.1 The approved aggregate gain or loss to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of uncontrollable factors shall be passed through as an adjustment in the tariff of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee over such period as may be specified in the Order of the Commission passed under these Regulations.



- 23.2 The Generating Company or Transmission Licensee or SLDC or Distribution Licensee shall submit such details of the variation between expenses incurred and revenue earned and the figures approved by the Commission, in the prescribed format to the Commission, along with the detailed computations and supporting documents as may be required for verification by the Commission.
- 23.3 Nothing contained in this Regulation 23shall apply in respect of any gain or loss arising out of variations in the price of fuel and power purchase, which shall be dealt with as specified by the Commission from time to time.

Regulation 24. Mechanism for sharing of gains or losses on account of controllable factors

- 24.1 The approved aggregate gain to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:
- (a) One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 21.6;
- (b) The balance amount, which will amount to two-thirds of such gain, may be utilised at the discretion of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee.
- 24.2 The approved aggregate loss to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:
- (a) One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 21.6; and
- (b) The balance amount of loss, which will amount to two-thirds of such loss, shall be absorbed by the Generating Company or Transmission Licensee or SLDC or Distribution Licensee."



The trued up ARR for FY 2021-22 as claimed by TPL-D (A) and as approved by the Commission is summarized in the Table below:

Table 4.40: Approved Trued up ARR incl. Gains/(Losses) for TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Claimed by Petitioner	Approved by Commission
ARR as per Order	5,133.56	5,133.56
Gains/(Losses) due to Uncontrollable Factors	(643.96)	(643.69)
Gains/(Losses) due to Controllable Factors (1/3 rd of total controllable Gains)	34.45	34.43
Pass through as Tariff	(609.51)	(609.25)
ARR True-Up	5,743.07	5,742.81

The Petitioner has requested the Commission to consider an amount of Rs.289.39 Crore as revenue towards recovery of earlier years' approved Gap/(Surplus) as per the Commission's orders vide 1926 of 2021 and 1805 of 2019). The Petitioner has submitted that carrying cost of past periods not allowed by the Commission shall be allowed to be recovered in totality as per APTEL judgement and accordingly carrying cost has been considered.

The Commission sought further break-up of the revenue of Rs. 289.39 Crore considered towards recovery of earlier years' approved Gap/(Surplus). The Petitioner vide additional details submitted the further break-up of the same as shown in the table below.

Table 4.41: Break-up of Revenue towards recovery of earlier years approved Gap/(Surplus) for TPL-D (A) claimed for FY 2021-22

Particulars	Approved (Rs. Crore)
Revenue Approved for FY 2019-20 (Incl carrying cost)	269.44
DSM	0.52
Impact of review petition pertaining to true-up of FY 2017-18 in Case No. 1805/2019	19.43
Total gap pertaining to prior period	289.39

The revenue gap claimed and approved for TPL-D (A) for FY 2021-22 is detailed in the Table below:



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

Table 4.42: Approved Revenue Gap for TPL-D (A) for FY 2021-22 (Rs. Crore)

Particulars	Claimed by Petitioner	Approved by Commission
Trued-Up ARR (After sharing of Gains and Losses)	5,743.07	5,742.81
Revenue from Sale of Power	5,652.05	5,652.05
Add: Revenue toward recovery of earlier year	289.39	289.39
(Gap)/Surplus	380.41	380.15

The Commission, accordingly, considers the trued-up Revenue Gap of Rs. 380.15 Crore for FY 2021-22, for determination of tariff for FY 2023-24.



5. Aggregate Revenue Requirement (ARR) for FY 2023-24 and determination of tariff for FY 2023-24

The MYT Regulations, 2016 defines control period at Regulations 2 (17) by stipulating it to be from 1st April 2016 to 31st March 2021. The Regulation 1.2 of the MYT Regulations, 2016 provides that these Regulations shall remain in force till 31st March 2021, unless otherwise reviewed/extended. The Commission, vide its order dated 24th September 2021 has directed the utilities to file the petition for truing up of FY 2020-21, ARR of FY 2022-23, and determination of tariff of FY 2022-23 as per the provisions of the MYT Regulations, 2016. Further, Commission vide its order dated 20th October 2022 has directed utilities to file the petition for truing up of FY 2021-22, ARR of FY 2023-24, and determination of tariff of FY 2023-24 as per the provisions of the MYT Regulations, 2016. Accordingly, the Petitioner has arrived at the ARR for the FY 2023-24 by computing each of the components as per the Regulations and principles enunciated by the Commission in the MYT Regulations, 2016.

5.1. Energy sales

It is necessary to have a category-wise energy sales projection for estimating the probable revenue from the sales and assess the quantum of power purchase. Realistic estimation of energy sales is, therefore, an important requirement. This section examines in detail the consumer category-wise sales projected by TPL in its petition for FY 2023-24 for approval of ARR.

5.1.1. Historical data of energy sales

TPL has furnished the category wise historical data of sales as given in the Table below.

Table 5.1: Historical data of energy sales in TPL – D (Ahmedabad) supply area (MUs)

Category	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY2021-22
RGP	2,517.12	2,669.94	2,821.25	2,939.69	2,946.60	2911.84
NRGP	914.72	957.20	998.05	1,017.24	798.15	970.82
LTMD	1,647.71	1,713.28	1,773.70	1,763.49	1,500.65	1698.00



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

Category	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY2021-22
HT	1,529.39	1,902.68	2,029.38	1,885.40	1,628.13	2013.04
Others	92.69	93.04	87.76	95.66	73.89	89.99
Total Sales	6,828.84	7,460.55	7,835.27	7,822.08	6,947.42	7683.69

5.1.2. Overall approach to sales projections

TPL has submitted that the license area of Ahmedabad has already witnessed surge in energy demand and consumption subsequent to the "Mega City" status. Subsequently, the growth rates in consumption have stabilised while growth in demand is at higher rate. Further, the Commission has notified the Net Metering Regulations, 2016 for rooftop solar projects which encourages residential & non-residential consumers to set up rooftop solar projects. The surge in solar rooftop installations witnessed in the later part of the 3rd control period is likely to affect the sales of mainly the residential category going forward. It may also be noted that post COVID-19 pandemic sales growth has normalized in line with pre-Covid period except for HT category. Hence, for FY 2023-24, sales are worked out considering marginal growth in HT category and 4 Year CAGR (FY 2015-16 to FY 2019-20) over approved gross sales of FY 2022-23 for balance categories. Further, sales in DOE category have been excluded to arrive at CAGR figures.

5.1.3. Projected energy sales

The category wise energy sales forecast for FY 2023-24 is as follows:

5.1.3.1 Residential (RGP)

Petitioner's submission:

The category-wise sales forecast has been arrived at as follows:

a) RGP Category

i. The category consists of Residential consumers and higher growth in the past was mainly due to new construction activities in the residential/real estate projects. Considering the effect of COVID-19 and resultant slowdown coupled with labor migration, the sales of RGP category were stagnant in FY 2020-21.



ii. The 4 Year CAGR considering FY 2019-20 as base and including the consumption through solar rooftop is 5.13%. The gross sales thus projected for FY 2023-24 is adjusted with estimated rooftop solar units of FY 2023-24 of 264.00 MUs to arrive at the net sales of FY 2023-24 for the category is **3017.39 MUs**.

Commission's analysis:

The Commission considers the submission of TPL and approves the sales to the residential category for FY 2021-22 as **3017.39 MUs**.

5.1.3.2 Non RGP Category

Petitioner's submission:

- i. The category consists of the commercial and small industrial consumers and is expected to have normal growth in the consumption. TPL-D does not expect any major incremental activity due to reduction in volume of major commercial projects, offices, and malls within the licensed area.
- ii. The 4 Year CAGR considering FY 2019-20 as base and including the consumption through solar rooftop is 3.55%. The gross sales thus projected for FY 2023-24 is adjusted with estimated rooftop solar units of FY 2023-24 of 38.94 Mus to arrive at the net sales of FY 2023-24 for the category at **1060.82 MUs.**

Commission's analysis:

The Commission considers the forecast made by the Petitioner and approves the same as submitted by the petitioner at **1060.82 Mus.**

5.1.3.3 Low Tension Maximum Demand (LTMD)

Petitioner's submission:

- i. This category consists of the consumption from electric installations above 15 kW for residential purpose, pumping stations run by local authorities, commercial and Industrial load. These are high consumption category of consumers which include the bigger commercial and industrial units.
- ii. Due to higher land cost within the licensee area and adherence to stringent



environmental norms, major expansion in industrial category is not seen within the license area. The sales of this category have also been affected by COVID-19.

iii. The 4 Year CAGR considering FY 2019-20 as base and including the consumption through solar rooftop is 2.05%. The gross sales thus projected for FY 2023-24 is adjusted with estimated rooftop solar units of FY 2023-24 of 26.05 MUs to arrive at the net sales of FY 2023-24 for the category at **1815.30 MUs**

Commission's analysis:

The Commission considers the forecast as projected by the Petitioner and approves the same as submitted by the petitioner at **1815.30 MUs**

5.1.3.4 HT Pumping Stations

Petitioner's submission:

- This category includes the water and sewerage pumping stations run by local authorities. The consumption in this category depends on monsoon and water table in the licensed area.
- ii. Considering that the sales in this category have largely remained stagnant, the sales of FY 2023-24 have been considered at the level of FY 2021-22 at 138.39
 MUs.

Commission's analysis:

The Commission considers the forecast as projected by the Petitioner and approves the same as submitted by the petitioner at **138.39 MUs.**

5.1.3.5 HT Maximum Demand (HTMD)

Petitioner's submission

i. HTMD category includes major industries in Ahmedabad like textile, chemical, process house, casting & moulding industries, and food & confectionary products. Most of these segments are facing stagnancy. Further, due to higher cost of space within the licensee area and adherence to stringent environmental norms, major



expansion in industries is likely to take place outside the license area.

- ii. In the last few years, some of the HT customers have set up their wind power generators and have availed the set-off of wind power generation against their consumption in the license area. This will have an impact on the actual sales of this category. Further, the sales to this category have also been impacted due to operationalization of open access since the MYT 2nd Control Period.
- iii. Additionally, during FY 2020-21, HT sales have gone down considerably due to COVID-19 pandemic and it is assumed that it will take time to regain normal consumption.
- iv. In this background, the gross HT sales for FY 2023-24 have been forecasted based on industry interactions and feedback. The open access (OA) sales for FY 2023-24 has been estimated at 40 MUs based on current trend.
- v. Based on all the above, the forecast of net sales for FY 2023-24 for the category is **1909.49 MUs** (excluding 40 MUs of Open Access sales)

Commission's analysis:

The Commission considers the forecast made by the Petitioner and approves the same as submitted by the petitioner at **1909.49 MUs.**

5.1.3.6 HT – Metro

Petitioner's submission:

- During MYT 3rd control period, the Hon'ble Commission has introduced the tariff category of HT-Metro to cater the requirement of electricity for Metro traction.
 - ii. During FY 2023-24, metro is expected to show growth due to incremental consumption. Accordingly, the estimated sales of FY 2023-24 are 35 MUs.

Commission's analysis:

The Commission considers the forecast made by the Petitioner and approves the same as submitted by petitioner at **35 MUs.**



5.1.3.7 HT – Electric Vehicles

Petitioner's submission:

- i. This category contains the sales to the Electric Vehicles Units at HT voltage level.
- ii. During FY 2023-24, this category is expected to show growth due to addition in consumers. Accordingly, the estimated sales of FY 2023-24 are expected to be higher than that of FY 2022-23 which is estimated at 12 MUs.

Commission's analysis:

The Commission considers the forecast made by the Petitioner and approves the same as submitted by petitioner at **12 MUs.**

5.1.3.8 Others Category

Petitioner's submission:

- i. This category contains the sales to the GLP category, LTP (AG), Streetlight, and LT & HT -Temporary and LT-Electric Vehicle Units. There has been degrowth in the category and there is no potential for any sudden spurt in growth due to the nature of consumption in the category.
- ii. The 4 Year CAGR considering FY 2019-20 as base and including the consumption through solar rooftop is -3.16 %. The gross sales thus projected for FY 2023-24 is adjusted with estimated rooftop solar units of FY 2023-24 of 2.42 Mus to arrive at the net sales of FY 2023-24 for the category as **67.88 Mus**.

Commission's analysis:

The Commission considers the forecast made by the Petitioner and approves the same as submitted by the petitioner at **67.88 Mus.**

5.1.3.9 Summary of Energy sales

Petitioner's Submission:

The energy sales forecasted for FY 2023-24 in each of the categories is stated as above. The Petitioner submits that the forecast of sales is based on realistic estimates



and requests the Hon'ble Commission to approve the energy sales as proposed.

Commission's analysis:

The Commission considers the forecast of energy sales of each category wise of consumers as made by the Petitioner. Accordingly, the energy sales for various categories are approved for FY 2023-24, which is shown in the below table;

Table 5.2: Approved Energy sales for TPL – D (Ahmedabad) area for FY 2023-24 (MUs)

Category	Projected by Petitioner	Approved by Commission
RGP	3,017.39	3,017.39
NRGP	1,060.82	1,060.82
LTMD	1,815.30	1,815.30
HT Pumping Stations	138.39	138.39
HT	1,909.49	1,909.49
HT-Metro	35.00	35.00
HT-EV	12.00	12.00
Others	67.88	67.88
Total Sales	8056.26	8056.26

5.1.4. Distribution losses

Petitioner's submission:

The Hon'ble Commission in its order dated 20th October, 2022 has directed the utilities to consider principles and methodology as provided in the MYT Regulations, 2016. In its Order dated 31st March, 2021 for Truing up of FY 2019-20 and ARR of FY 2021-22, the Hon'ble Commission has considered the 3-year average (FY 2016-17 to FY 2018-19) considering FY 2019-20 as Covid affected year. As FY 2020-21 and FY 2021-22 were also Covid affected year, the Petitioner has considered the Distribution loss for FY 2023-24 at the same level of FY 2022-23 at **6.03%**.

Commission's analysis:

The Commission observed that the Petitioner has projected distribution losses level of 6.03% by considering the 3-year average (FY 2016-17 to FY 2018-19) considering FY 2019-20 as Covid affected year so also the FY 2020-21 & FY 2021-22 for FY 2023-24



while determining its energy requirement @ distribution periphery, however, TPL- D (A) has already achieved a distribution losses level of 4.17% during FY 2021-22. In lieu of above, the Commission views that it is appropriate to consider the weighted average of distribution losses for the last three years i.e. FY 2019-20, FY 2020-21 & FY 2021-22 as the last month of FY 2019-20 & FY 2020-21 covid effected year and the FY 2021-22, the resumption of economic activities post-COVID lockdown as well as uniformity across all the distribution utilities in the State of Gujarat. Accordingly, the distribution losses level of TPL-D (A) works out to 5.03% for FY 2023-24, which is tabulated as below;

Table 5.3: Computation of distribution losses for FY 2023-24

Period	FY 2019-20	FY 2020-21	FY 2021-22	Total
Energy Sales (in Mus)	7822.08	6974.42	7683.69	22453.19
Distribution losses (in MUS)	409.96	445.57	334.29	1189.82
Energy Requirement @ Distribution periphery	8232.04	7392.99	8017.98	23643.01
Distribution Losses (%)	4.98%	6.03%	4.17%	5.03%

5.1.5. Energy Requirement

Petitioner's submission:

Based on the energy sales forecast, estimation of distribution loss and transmission loss, the total energy requirement for FY 2023-24 is estimated. The total energy requirement thus arrived is shown in the table below. The Petitioner has also submitted that the estimated energy requirement and corresponding power purchase cost is arrived at on pooled basis keeping in mind the overall demand requirement of Ahmedabad & Surat Supply Areas.

Table 5.4: Energy requirement projected by TPL-D for FY 2023-24 (MU)

Particulars	Projected by	
Ahmedabad Supply Area		
Total Sales	8056.26	
Distribution Loss (%)	6.03%	



Particulars	Projected by
Distribution Loss	516.69
Energy Required at Distribution	8572.95
220 kV/Transmission Loss (%)	2.06%
220 kV/Transmission Loss	180.23
Energy Requirement of TPL-D (A)-A	8753.18
Energy Requirement of TPL-D (S)-B	3723.59
Total Energy required by TPL-D (A+B)	12476.77

Commission's analysis:

Based on the energy sales and distribution losses % as approved earlier sections and transmission losses % as per True up of FY 2021-22. The Commission has computed the energy requirement of TPL-D (A) & TPL-D (S) and at their peripheries as given in table below:

Table 5.5: Energy requirement approved by the Commission for TPL-D for FY 2023-24 (MU)

Particulars	Projected by Petitioner	Approved by the Commission
Ahmedabad Supply Area		
Total Sales	8056.26	8056.26
Distribution Loss (%)	6.03%	5.03%
Distribution Loss	516.69	426.91
Energy Required at Distribution periphery	8572.95	8483.17
220 kV/Transmission Loss (%)	2.06%	0.51%
220 kV/Transmission Loss	180.23	43.08
Energy Requirement of TPL-D (A)-A	8753.18	8526.25
Energy Requirement of TPL-D (S)-B	3723.59	3691.20
Total Energy required by TPL-D-(A+B)	12476.77	12217.45

The Commission approves the energy requirement of TPL-D supply area of A 'bad & Surat at their peripheries for FY 2023-24 as shown in the Table above.

5.1.6. Energy Availability

Petitioner's submission:

The energy sourcing is planned from two types of sources, i.e., (a) Long Term Sources and (b) Short Term Sources including bilateral sources / power exchanges. The long-



term sources include TPL – G (APP) sources, SUGEN/ UNOSUGEN and Renewable Energy sources. For long term sources of SUGEN / UNOSUGEN, TPL has made necessary arrangement to reserve the regas capacity in order to achieve certainty for availability of Regas facility and eliminate incremental cost involved in terms of margins of intermediaries in the process of regas operations. This regas capacity booking is in addition to availability of gas from IOCL and RIL. Further, the Petitioner has also made necessary arrangements for Transportation of Gas with GSPL. At present, the Petitioner has estimated lower offtake from SUGEN/ UNOSUGEN due to higher gas cost. This might result in Use or Pay Charges for unutilised Regas capacity and Ship or Pay Charges for unutilised Transportation capacity. However, the Petitioner will endeavour to exercise necessary business prudence to optimize the cost by giving due consideration to these charges, as may be feasible, while ensuring reliability of sources.

The Hon'ble Commission has specified the Renewable Purchase Obligation (RPO) as per the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 read with the Amendment to the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010. Accordingly, the Petitioner has estimated the availability of renewable energy for FY 2023-24 from the tied-up capacities of RE Power.

The balance power would be sourced from short-term sources as and when required. Further, the Petitioner has planned to source the power for FY 2023-24 subject to technical minimum /must run criteria while ensuring reliability of power giving due consideration to optimisation of cost.

Table 5.6: Energy availability as projected by Petitioner for FY 2023-24 (MU)

Particulars	Projected by Petitioner
TPL-G (APP)	2,565.31
SUGEN/UNOSUGEN	3,826.35
Bilateral/Power Exchange	3,846.24
Renewable Energy	2,238.86
Total	12,476.77



Commission's analysis:

As per GERC (MYT) Regulation, 2016, the Distribution Licensees are required to project the power purchase requirement based on the Merit Order Dispatch principles of all generating stations considered for power purchase, RPO and the targets set if any, for Energy Efficiency and DSM schemes.

TPL-D has projected power purchase requirement of 12476.77 MUs whereas the Commission has approved 12217.45 MUs based on the approved energy sales, transmission and distribution losses as mentioned in earlier sections. Accordingly, the quantum of energy purchase is regulated as detailed below.

The Commission has observed that the Petitioner has projected quantum of purchase from Wind and Solar Energy sources only @17.94% (2238.86/12476.77) MU for FY 2023-24, however, the Commission has considered @18.70% i.e., 2,284.66 MU (18.70%*12217.45) as per GERC (Procurement Energy from Renewable Sources) (Third Amendment) Regulations, 2022 for FY 2023-24 RPO targets. No purchase of RECs has been considered in view of Gujarat being RE rich State and the prevailing low rates of renewable power discovered through competitive biddings.

The Commission has considered the quantum of energy availability from TPL– G (APP) as approved in the Order of TPL–G(APP), for FY 2023-24 in Petition No. 2178 of 2023.

For long term sources of SUGEN / UNOSUGEN, the Petition has submitted that it has made necessary arrangement to reserve the regas capacity in order to achieve certainty for availability of Regas facility and eliminate incremental cost involved in terms of margins of intermediaries in the process of regas operations. This regas capacity booking is in addition to availability of gas from IOCL and RIL. It has further submitted that it has also made necessary arrangements for Transportation of Gas with GSPL. At present, the Petitioner has estimated lower offtake from SUGEN/UNOSUGEN due to higher gas cost. This might result in Use or Pay Charges for unutilised Regas capacity and Ship or Pay Charges for unutilised Transportation capacity. It has further submitted that it will endeavour to exercise necessary business prudence to optimize the cost by giving due consideration to these charges,



as may be feasible, while ensuring reliability of sources. The Commission is noted their submission. Accordingly, the Commission has considered the quantum of purchase from SUGEN and UNOSUGEN as projected by the Petitioner for FY 2023-24.

The remaining required power purchase is considered from Power purchase from bilateral and power exchange are considered to match the Energy Balance.

In case, if there is any shortfall of energy in the procurement of power through tied up sources, the same shall be made by TPL-D through power exchange or e-bid procurement through MSTC. The energy availability projection as approved by the Commission for FY 2023-24 is given in the table below:

Table 5.7: Energy availability approved by the Commission for TPL-D supply area for FY 2023-24 (MUs)

Particulars	Projected by Petitioner	Approved by Commission
TPL-G (APP)	2,565.31	2,565.31
SUGEN UNOSUGEN	3,826.35	3,826.35
Bilateral & Others	3,846.24	3,541.12
Renewables	2,238.86	2,284.66
Total	12,476.77	12,217.45

TPL-D is advised to adhere to the above power procurement sources and quantum as approved by the Commission.

5.1.7. Power Purchase Cost

Petitioner's submission:

The Petitioner has submitted that based on the energy quantum estimated in table above, the power purchase cost for each of the sources is computed. The source-wise estimated power purchase cost is provided hereunder:

- TPL-G (APP) The power purchase cost is based on the costing arrived at from the ARR computation in the petition filed for TPL-G (APP).
- SUGEN Plant The power purchase cost is as per the CERC approved tariff and operating norms.



- UNOSUGEN The power purchase cost is as per the CERC approved tariff and operating norms.
- Bilateral Sources/ Power Exchange The power purchase rate for bilateral sources/power exchange is arrived at by considering the likely short term market conditions.
- Renewable Power Purchase Cost-The Petitioner has estimated the purchase of power from the tied-up capacity of renewable energy sources to fulfill the Renewable Power Purchase Obligation in accordance with the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 read with the Amendment to the Regulations. Accordingly, the Petitioner has arrived at the renewable power purchase cost.

The power purchase cost projected by the Petitioner is as given in the table below.

Table 5.8: Power Purchase Cost Projected by TPL-D for FY 2023-24 (Rs. Crore)

Particulars	Projected by Petitioner
TPL-G (APP)	1,431.52
SUGEN/UNOSUGEN	3,036.52
Bilateral/Power Exchange	2,115.43
Renewables	1,032.56
Total	7,616.04

Commission's analysis:

Regarding the power purchase cost associated with renewable energy power, it has been observed that the Petitioner has submitted the details of tied up for Solar & Wind sources and considered the average of Procurement Rate as Rs. 4.61/kWh for 2238.86 MUs for FY 2023-24. The Commission has considered the rate for procuring power from the renewable sources (Wind & Solar) as projected by the Petitioner and balance power i.e. 45.80 Mus (2284.66MUs-2238.86MUs) to meet RPO requirement also considered the same rate i.e. Rs. 4.61 per Unit. Since, the Power Purchase Cost is an estimate and therefore, the Licensee shall take due care to procure all additional Renewable Power Requirement through competitive bidding to pursue that the power purchase cost is optimized.



In case of procurement from TPL-G (APP), the same has been derived from the power generation cost as determined by the Commission for FY 2023-24 in Tariff Petition No. 2178 of 2023.

For long term sources of SUGEN / UNOSUGEN, the Petition has submitted that it has made necessary arrangement to reserve the regas capacity in order to achieve certainty for availability of Regas facility and eliminate incremental cost involved in terms of margins of intermediaries in the process of regas operations. This regas capacity booking is in addition to availability of gas from IOCL and RIL. It has further submitted that it has also made necessary arrangements for Transportation of Gas with GSPL. At present, the Petitioner has estimated lower offtake from SUGEN/ UNOSUGEN due to higher gas cost. This might result in Use or Pay Charges for unutilised Regas capacity and Ship or Pay Charges for unutilised Transportation capacity. It has further submitted that it will endeavour to exercise necessary business prudence to optimize the cost by giving due consideration to these charges, as may be feasible, while ensuring reliability of sources. The Commission has noted their submission. It is fact that SUGEN & UNOSUGEN tariff has been determined by the CERC and the Commission has adopted the same and factored in the power procurement cost. SUGEN & UNOSUGEN cost consists of the fixed cost as well as variable cost. Regarding the fixed cost of SUGEN/ UNOSUGEN Plants, the Petitioner estimated a total cumulative capacity charge at Rs. 837.52 Crore. Accordingly, the Commission has considered the capacity charges payable to SUGEN and UNOSUGEN at Rs. 837.52 combined for FY 2023-24.

It has been found that TPL has proposed variable charges of Rs 5.75/kWh as a weighted average cost of fuel combinedly for SUGEN and UNO SUGEN plant. However, the Commission has considered the variable charges as Rs 4.52/kWh as weighted average cost of fuel SUGEN and UNO SUGEN combinedly which is approved in the Truing up of FY 2021-22 while estimating the Power Purchase costs for TPL-D (A) and TPL-D(S) licensee Areas for FY 2023-24. However, the Commission will allow the Power Purchase costs of SUGEN & UNO SUGEN in accordance with the CERC/GERC Orders at the time of Truing up exercises.



In the above Table, it has been observed that the Commission has approved 3541.12 Mus from the source of bilateral/power exchange. The Commission has considered the procurement rate as Rs. 5.38 per Unit approved in the Truing up of FY 2021-22.

Considering above, the total procurement cost for power from different sources for TPL-D during FY 2023-24 works out as given in the table below:

Table 5.9: Summary of approved power procurement sources with cost/kWh for TPL-D for FY 2023-24

Source of Power (Station wise)	Energy Received (MU)	Capacity Charges paid/ payable by Utility (Rs Crore)	Variable Cost per unit (Rs/ kWh)	Total Variable Charges (Rs Crore)	Total Cost of Energy purchased (Rs Crore)	Per Unit Cost of energy purchase d (Rs/ kWh)
AMGEN	2,565.31	315.11	3.66	937.68	1,252.79	4.88
SUGEN/UNOSUGEN	3,826.35	837.52	4.52	1729.60	2,567.12	6.71
Bilateral /Exchange	3,541.12	-	5.38	1,905.85	1,905.85	5.38
Renewables (solar +wind) (RPO)	2,284.66	-	4.61	1,053.23	1,053.232	4.61
Total	12,217.45	1,152.63		5,626.36	6,778.99	
Energy Required for TPL-D (A) (MU)					8,526.25	
Power Purchase Cost for TPL-D (A)					4,730.89	

The above power procurement cost is reflective of power requirement of both Ahmedabad and Surat area. For arriving at individual power purchase cost, the total power purchase cost is apportioned in the ratio of power requirement between the two cities. The following table depicts the power purchase cost of Ahmedabad area for FY 2023-24.

Table 5.10: Approved Power Purchase Cost for TPL-D (Ahmedabad) (Rs. Crore)

Energy Sources	Projected by Petitioner (Rs. Crore)	Approved by Commission (Rs. Crore)
Power Purchase Cost	5343.09	4,730.89



5.2. Fixed Charges

5.2.1. Operation and Maintenance (O&M) Expenses

Petitioner's submission:

The Petitioner has submitted that The Hon'ble Commission in its order dated 20th October, 2022 has directed the utilities to consider principles and methodology as provided in the MYT Regulations, 2016.

The Petitioner has projected the O&M expenses of FY 2023-24 as per the methodology specified in MYT Regulations, 2016 by considering O&M expenses of last 3 years (i.e. FY 2019-20 to FY 2021-22) with FY 2020-21 as base year and escalating by 5.72% per annum. Accordingly, the O&M expenses arrived through this methodology for Ahmedabad Supply Area is **Rs. 423.86 Crore** for FY 2023-24.

The petitioner also submitted that, that the above O&M expenses does not consider the uncontrollable expenses such as the wage revision, change in law, change in levies/duties/ taxes and charges, etc. Therefore, the Petitioner requests the Hon'ble Commission to treat these components as uncontrollable factors and any such expenses on accounts of these factors are to be allowed over and above the normal allowable.

Commission's analysis:

In line with the principles and methodology as provided in the GERC MYT Regulations, 2016, the Commission has projected O&M expenses based on the average of actual O&M expenses for the previous three years i.e., FY 2019-20 to FY 2021-22 escalated @5.72% to arrive at O&M expenses for FY 2023-24 at Rs. 423.86 Crore. Accordingly, the Commission approves Rs. 423.86 Crore of O&M Expenses for FY 2023-24.



Table 5.11: O&M Expenses approved by Commission for FY 2023-24

Sr. No.	Particulars	Projected by Petitioner	Approved by Commission
1	O&M Expenses	423.86	423.86
1.1	Employee Expenses	176.65	176.35
1.2	R&M Expenses	135.81	135.81
1.3	A&G Expenses	111.39	111.69
	Total Operation & Maintenance Expenses (net of capitalisation)	423.86	423.86

5.2.2. Capital Expenditure, Capitalization and Sources of Funding

Petitioner's submission:

The Petitioner has projected capital expenditure of Rs.1519.50 Crore for FY 2023-24 as per the details given in the Table below:

Table 5.12: Capital expenditure claimed by TPL-D (A) for FY 2023-24 (Rs. Crore)

Particulars	Projected by the Commission
EHV Network	872.12
HT Network	234.59
LT Network	196.61
Meter Management	88.09
PSC	30.00
IT & Related Expenditure	16.37
Other Departments	81.73
Total	1,519.50

Ahmedabad and Gandhinagar city are being developed as the hub for commercial and service sector. The electricity demand has increased from 1720 MW in FY 2016-17 to 2016 MW in FY 2019-20 i.e. at a 3-year CAGR rate of about 5.47%. Further, the existing load density of Ahmedabad/Gandhinagar license area is about 6 MW/sq.km which is likely to increase in the coming years.

The urbanisation of the twin cities of Ahmedabad & Gandhinagar has resulted in increasing issues of availability of corridor for creation of evacuation network.



Further, new initiatives such as Smart City, infrastructure projects like BRTS/Metro, modern water/sewage systems necessitate creation of state-of-the-art electrical network with ability of handling large quantum of power at the higher level of reliability. The Petitioner has planned to undertake capital expenditure for augmentation and up-gradation of distribution network to meet the future load growth while ensuring reliability & quality of power along with safety measures.

The capital expenditure for Ahmedabad & Gandhinagar Area consists of expenditure

to create capacity and reliability in EHV network to provide un-interrupted supply, additional EHV & HV substations to cater to the load growth, LT network to meet the consumer connectivity, customer connect center, power supply center, and other miscellaneous items such as automation, IT etc. TPL has furnished the details of major capital expenditure as detailed below:

a) EHV Network:

<u>Bulk Supply Points:</u> Looking to the long-term power requirement of Ahmedabad and Gandhinagar license areas, TPL-D had proposed to establish 220 kV substations during the 3rd Control Period. Based on the approvals, work has been initiated on the supply points from FY 2019-20 in Thaltej, Acher, and GOTA and shall be continued during FY 2023-24.

- EHV Lines: To cater the load growth, capex is proposed towards upgradation of 132 kV Sabarmati to Dudheshwar substation and for additional connectivity between 132 V Kazipur to Dudheswar substations.
- EHV Substations: The system demand of Ahmedabad & Gandhinagar city is increasing year on year. In order to cater to these requirements, it is necessary to undertake capacity augmentations. Hence, during the 3rd MYT control period, the Hon'ble Commission has approved to establish substations at strategic locations to meet future requirements. Accordingly, Petitioner proposes to establish 132 kV substation at Kazipur, Wadaj, and New Maninagar. Additionally, the Petitioner proposes for AIS to GIS conversion of substation at New Pirana and GIS at Pirana and



Airport. Further, additional transformers of 132/33 kV and 132/11 kV are also required to be installed to cater to the load demand of nearby areas and to feed the upcoming 33 kV/11 kV substations respectively.

- <u>EHV Consumers:</u> TPL has also envisaged energisation of EHV consumers based on existing trend.
- <u>33 KV Substations:</u> Considering the proposed expansion of existing network and the additional load growth in the supply area, 33 kV substations have been planned at Gita Mandir, Maninagar, Sachivalay, Electronic SEZ, Platinum Park, Naroda, New Naroda, Bopal, Usmanpura, Koteshwar, etc. Further, additional transformer is proposed at various 33 kV substations.
- <u>Renovation & Replacement:</u> It is proposed to incur capex for phasing out obsolete assets and refurbishment under the head of renovation and replacement.
- <u>Safety</u>: Safety schemes are proposed for ensuring general public safety, environment safety, and safety for employees. Some of the major safety schemes proposed pertain to procurement of safety tools, replacement of old conductors, safeguarding of towers, replacement of switchyard equipment, earthing system for towers, and various firefighting arrangements.
- Support infrastructure: Support infrastructure expenditure is proposed for purchase of advance tools & tackles, and testing kits.
- Automation: Under this head, Substation Automation and Islanding schemes are proposed for facilitating remote control and monitoring for better network operation.

b) HT Network:

Normal Load Growth: The details of capital expenditure proposed under the head of normal load growth is as under:

o New Substations: To meet the additional load requirement of existing as well as new consumers the distribution transformers (DT's) need to be upgraded and new DT's need to be installed at the load centre. The substation needs to be planned in



load centre to ensure lower LT length of lines to maintain the existing level of losses. This also involves the development of necessary network by laying new 11 kV cable and installation of switchgear.

o HT Consumers: Based on the expected number of new HT consumer as well as load enhancement of the existing consumers, the Petitioner has proposed expenditure for creating necessary network infrastructure including HT cable, RMU and Other Accessories.

o Transformer Augmentation: In order to meet the load growth in the supply area, it is proposed to replace existing distribution transformers by higher size. o 11 kV Normal Load Growth/OHL Schemes: It is proposed to carry out network modification schemes including laying of new feeders from existing and proposed EHV substations. During FY 2023-24, network modification schemes are proposed in order to remove bottlenecks from existing system.

• Reliability, Renovation & Modernization: This includes expenses towards replacement of PILC cable, replacement of old and faulty distribution transformers, replacement of transformers with poor oil quality, and replacement of faulty switchgear. Network modification for infrastructure projects is also proposed to be carried out.

During FY 2023-24, it is proposed to carry out feeder Automation. Additionally, in order to maintain power quality and for ensuring better performance of the system, it is proposed to install Automatic Power Factor Correction Panels (APFC) at Distribution Substation.

- Supporting Infrastructure: This includes expenses on equipment's such as Meggers, Thumpers, Earthing testers, etc.
- Safety: Safety schemes are proposed for replacement of conventional oil filled switchgears, RMU/ FSP replacement, Distribution substation revamping, and PMT to Compact Substation replacement in dense areas, replacement of oil type transformer with dry type transformer for ensuring general public safety, environment safety, and safety for employees.



c) LT Network:

• Normal Load Growth: The details of capital expenditure proposed under the head of normal load growth is as under:

o New Connection/Load Extension/Reduction: The LT capital expenditure is planned to provide network for last mile connectivity as well as for maintaining "ready to serve" network. The capex is proposed based on expected applications for new connection and extension/reduction.

o Relieving Overload Distributions, Load Balancing/ Interlinking of New Substations: There are continuous changes in the load or demand requirement of the customers due to which the loading of the LT cables increase and this result into outages or breakdowns. Accordingly, it is proposed to undertake distributor load relieving/balancing and network modification schemes for relieving overloaded distributors. It is also proposed to undertake interlinking of distributors to enhance the system reliability.

- Supporting Infrastructure: This includes expenses on equipment such as Meggers, Cable Fault Locators, Thumpers, Earth Testers, Reference Standard Meters, Meter Reading Instruments, Clip on meters, etc.
- Reliability, Renovation and Replacement: It is proposed to undertake schemes for old and obsolete network up gradation (T-off network removal/ Bifurcation of distributors) for network improvement. This will increase the system reliability. Further, road widening work is being carried out at various places in and around the Supply area. This has necessitated shifting work of LT network & assets.
- Safety: This includes expenditure proposed for carrying out replacement of Old MSP, Old LC network, and Service Revamping.

d) Metering

Metering system is an important facet of any electricity distribution utility. Capital expenditure is planned for purchasing Meters, CT/Seals etc. for the following



activities:

o Meters for releasing solar net meters under the GERC Net Metering Regulations, 2016.

o Meters for replacing old electromechanical meters in a phased manner

o Meters for replacing static electronic meters which are vulnerable to theft o Meters for replacing defective energy meters based on the past trend of defective meters replaced

o Meters for providing new electric connections/enhancement of load and for energy accounting for DT meters/Interface meters etc.

o Installation and replacement of consumer/DT/feeder meters with smart meters to comply with Ministry of Power notification Out of the total expenditure, expenditure of Rs. 40.15 Crore is planned for installation and replacement of consumer/DT/feeder meters with smart meters. Balance expenditure of Rs. 47.22 Crore is planned towards release of normal services consisting of new connections & load enhancement requirements and Rs. 0.72 Crore for supporting infrastructure like test benches. It may kindly be noted that implementation of smart meter will also necessitate additional O&M expenses to meet with communication, IT infrastructure requirements, etc.

e) Others

Apart from the above, expenditure is also proposed for Power Supply Center, Automatic Meter Reading, Special projects, IT & related infrastructure, Storage system, office space, etc. These schemes are detailed as under:

• Power Supply Centre: This includes capex to be incurred for Power Supply Centre at various locations including Naranpura.

- IT & related expenditure: This includes capex requirements related to setting up new Data center, hardware replacements, software upgradation, new IT initiatives and projects, SAP licenses, network upgradation, communication, etc.
- Special Project: It is proposed to incur capex for Advanced Distribution



Management System to provide a single integration system combining SCADA, DMS, OMS, etc. Capex is also proposed towards pilot project of Smart Grid, Advanced Metering Infrastructure, Meter Data Management System.

• Apart from above, CAPEX is required for following activities such as QA/QC, Stores, Customer Services, RPRC and other Miscellaneous expenses. It includes CAPEX for technical equipment, vehicle, other infrastructure as well as digitization / upgradation of existing system. The same has been categorized as Other Department and Miscellaneous.

Commission's analysis:

The Petitioner has projected CAPEX of Rs.1519.50 Crore for FY 2023-24 as detailed in earlier sections. The Petitioner has furnished the project/work-wise justification for the CAPEX projected for FY 2023-24.

The Commission opines that in order to meet the load growth, system demand and to provide reliable quality supply has provisionally approved the CAPEX for FY 2023-24 as projected by the Petitioner.

The Commission, accordingly, approves the Capital expenditure (CAPEX) at Rs.1519.50 Crore for FY 2023-24.

b) Capitalization and Gross Fixed Assets

Petitioner's submission:

TPL has projected Rs.1940.10 Crore towards capitalization for FY 2023-24 and furnished the project/work-wise details of capitalisation in Form 4.3 to the petition.

Table 5.13 Capitalisation Projected for FY 2023-24 (Rs. Crore)

Particulars	Claimed by Petitioner
Opening GFA	8748.62
Addition to GFA	1940.10
Deletion to GFA	-
Closing GFA	10688.72
SLC addition	85.22



Commission's analysis:

The Commission has observed (from Form 4.3) that the Petitioner has proposed capitalisation of CAPEX relating schemes as given hereunder:

Table 5.14: Projected CAPEX, capitalisation by TPL-D (A) for FY 2023-24 (Rs. Crore)

Project Code	Capitalisation projected by petitioner	
EHV		
Bulk Supply Points	1,010.45	
EHV Lines	-	
EHV Consumers	5.30	
EHV SS	170.78	
33 kV SS	111.55	
Renovation and Replacement	2.91	
Safety	2.72	
Support Infrastructure	1.97	
Automation	0.74	
Sub-Total Sub-Total	1,306.43	
HT		
11kV Normal Load Growth	153.28	
Reliability, Renovation & Modernization	61.81	
Safety	17.20	
Supporting Infrastructure	2.30	
Sub-Total Sub-Total	234.59	
LT		
Normal Load Growth	105.96	
Reliability, Renovation & Replacement	27.95	
Safety	61.50	
Supporting Infrastructure	1.20	
Sub-Total	196.61	
Meters		
Normal Load Growth	47.22	
Reliability, Renovation, And Replacement	40.15	
Supporting Infrastructure	0.72	
Total Meters	88.09	
PSC	-	
IT & Related expenditure	16.37	
Other Departments	98.02	
Grand Total	1,940.10	

On query regarding estimation/projection of high capitalization in the FY 2023-24, the



Petitioner has submitted that major industries in Ahmedabad/Gandhinagar pertain to textile, chemical, process house, casting & moulding industries, and food & confectionary products. Most of these segments are facing stagnancy. Further, due to higher cost of space within the license area and need for adherence to stringent environmental norms, expansion in these industries is likely to take place outside the license area. However, these industries are getting replaced by high end residential and commercial establishments wherein demand would be higher, and utilization (Sales) would be lower. It has further submitted that the electricity demand of Ahmedabad/Gandhinagar has increased from 1720 MW in FY 2016-17 to 2016 [VIW in FY 2019-20 i.e. at a 3 Yr CAGR rate of about 5.47%. Further, the existing load density of Ahmedabad/Gandhinagar license area is about 6 MW/sq.km which is expected to increase in the coming years. it has further submitted that in the last few years, HT customers have set up their wind power generators and have availed the set-off of wind power generation against their consumption in the license area. This has an impact on the actual sales despite increasing demand. Further, the solar rooftop installations have surged to 245 MW in FY 2021-22 and is expected to reach to 478 MW in FY 2023-24. It has further stated that Solar rooftop generation is intermittent and necessitates creation of necessary infrastructure to ensure reliability of the system to evacuate reverse power flow in off-peak/ non-usage hours for capacity beyond the contract demand/connected load of the consumer. It has further stated that the urbanisation of the twin cities of Ahmedabad & Gandhinagar has resulted in increasing issues of availability of corridor for creation of evacuation network. This has necessitated long term infrastructure planning to accommodate future demand without compromising on reliability and safety. Further, new initiatives such as Smart City, infrastructure projects like BRTS/Metro, modern water/sewage systems necessitate creation of state-of-the-art electrical network with ability of handling large quantum of power at the higher level of reliability.

It has further submitted that it has also planned to undertake capital expenditure for augmentation and up-gradation of distribution network to meet the future load growth while ensuring reliability & quality of power along with safety measures.



The Commission has noted their submission. It is fact that the Petitioner has estimated the Capitalization at the tune of Rs. 1940.10 Crore as against Rs. 1519.50 Crore of the Capital expenditure. To balancing the interest of the consumer and the distribution utility, we of the view that it is appropriate to consider the ratio of the average Capitalization vis-à-vis Capital Expenditure last true up years. Accordingly, The Commission has worked out the average capitalization over approved CAPEX for last four years i.e., from FY 2018-19 to FY 2021-22 works out to 62.48%. Accordingly, for FY 2023-24 the Commission approves capitalization of Rs. 1,212.17 Crore (1,940.10*62.48%).

The Commission has approved closing GFA at Rs. 7,672.62 Crore in true up for FY 2021-22 and the same is considered as opening GFA for FY 2022-23. Further, the Commission has considered capitalisation of Rs. 1182.42 Crore as approved in Tariff Order dated 31.03.2022 for FY 2022-23 and arrived at the closing GFA for FY 2022-23 at Rs. 8855.04 Crore and the same is considered as opening GFA for FY 2023-24. The Commission has further considered the SLC addition as projected by the Petitioner.

The Commission in terms of the GERC (MYT) Regulations, 2016 has approved the funding of capitalisation for normative debt-equity. The Commission, as deliberated above has considered the opening GFA, additions during the year and closing GFA for FY 2023-24 as given in the table below:

Table 5.15: Gross Fixed Assets approved for FY 2023-24 for TPL-D (A) (Rs. Crore)

Particulars	Claimed by Petitioner	Approved by Commission
Opening GFA	8,748.61	8855.04
Addition to GFA	1,940.10	1212.14
Deletion to GFA	-	-
Closing GFA	10,688.71	10067.18
Less: SLC Addition	85.22	85.22
Balance Capitalisation	1,854.87	1126.92
Normative Debt @70%	1,298.41	788.84
Normative Equity @30%	556.46	338.08

The Commission, accordingly, approves the GFA and funding for FY 2023-24 as detailed in the table above.



5.2.3. Depreciation

Petitioner's submission:

The petitioner submits that, the depreciation rates as per the CERC (Terms & Conditions of Tariff) Regulation, 2004 is applied on the opening GFA of FY 2009-10 and for addition of assets from 1st April 2009 onwards depreciation has been computed at the rates specified in the GERC Regulations. TPL-D (A) has projected **Rs.364.04 Crore** towards depreciation for FY 2023-24

Commission's analysis:

The Commission has approved the opening value of depreciable GFA at as discussed in the earlier sections. The GFA is further updated with the capitalisation approved for FY 2023-24 to compute the depreciation.

The rate of depreciation on assets and SLC is considered as submitted by the petitioner. The computation of Depreciation as given in the table below:

Table 5.16: Depreciation approved for FY 2023-24 (Rs. Crore)

Particulars	Approved by Commission
Opening value of GFA	8855.04
Additions during year	1212.14
Closing GFA	10067.18
Average Depreciable Assets	9461.11
Wt. Avg. Rate of Dep.	4.36%
Depreciation	412.67
Depreciation created out of SLC	65.17
Depreciation allowed	347.50

The Commission approves the depreciation for FY 2023-24 as shown in the above Table.

5.2.4. Interest and Finance Charges

Petitioner's submission:

TPL has claimed a sum of Rs.234.29 Crore towards interest on loans for FY 2023-24.



The Petitioner has submitted that interest is calculated on normative loans in terms of the GERC (MYT) Regulations, 2016 by applying estimated interest rate of 9.25%, while repayment has been considered equal to the depreciation of the assets for the year. The Petitioner has estimated the interest on security deposit for the year considering the interest rate of 4.25% on the average of opening balances and closing balance of security deposit for the Ahmedabad supply area. The addition has been projected on the basis of trend observed in the supply area.

Table 5.17: Interest on loans projected by TPL-D (A) for FY 2023-24 (Rs. Crore)

Particulars	Claimed by Petitioner
Opening Balance	2,065.73
Loan addition during year	1,298.41
Repayment during year	364.04
Closing Balance	3,000.10
Average Loan	2,532.91
Weighted average rate of interest (%)	9.25%
Interest Expenses	234.29

Commission's analysis:

The Commission has approved the normative closing loan balance at Rs. 1,661.32 Crore in truing up for FY 2021-22 and the same is considered as opening loan for FY 2022-23. The addition to loan is further updated with the normative loan based on capitalisation approved for FY 2022-23 in the Order dtd. 31.03.2022, which is Rs. 774.26 Crore and also adjustment of Repayment in FY 2022-23, arrived at the closing Loan for FY 2022-23 at Rs. 2127.81 Crore and the same is considered as opening Loan for FY 2023-24.

The rate of interest is considered as per the actuals of FY 2021-22, which is approved in this Order and accordingly computed the interest on loan for FY 2023-24 as given in the table below:



Table 5.18: Interest on loans approved for FY 2023-24 (Rs. Crore)

Particulars	Claimed by Petitioner	Approved by Commission
Opening Balance	2,065.73	2127.81
Loan addition during year	1,298.41	788.84
Repayment during year	364.04	347.50
Closing Balance	3,000.10	2,569.15
Average Loan	2,532.91	2,348.48
Weighted average rate of interest (%)	9.25%	7.27%
Interest Expenses	234.29	170.64

The Commission, accordingly, approves the interest on loan for FY 2023-24 as detailed in the table above.

5.2.5. Interest on Security Deposit

Petitioner's Submission:

The Petitioner has projected Rs. 44.02 Crore towards interest on security deposit for FY 2023-24. The Petitioner considered 4.25% interest rate on the average estimated balance of security deposit for FY 2023-24.

Commission's Analysis:

The Commission considers and approves the interest on security deposit of Rs. 44.02 Crore as projected by the Petitioner for FY 2023-24.

5.2.6. Return on Equity

Petitioner's submission:

The return on equity has been computed based on the opening & closing balance of the equity arrived at considering the estimated capitalization in FY 2023-24. The RoE is computed at 14% on the average of the opening & closing balance of the equity and accordingly, projected **Rs.388.19 Crore** towards Return on Equity @ 14%.

Commission's analysis:

The Commission has approved the normative closing equity at Rs. 2,195.45 Crore in



truing up for FY 2021-22 and the same is considered as opening equity for FY 2022-23. The addition to equity is further updated with the normative equity based on capitalisation approved for FY 2022-23 in the Order dtd. 31.03.2022, which is Rs. 331.82 Crore, arrived at the closing equity for FY 2022-23 at Rs. 2527.27 Crore and the same is considered as opening equity for FY 2023-24. The Commission accordingly computed the Return on equity for FY 2023-24 as given in the table below:

Table 5.19: Return on Equity approved by the Commission for FY 2023-24 (Rs. Crore)

Particulars	Projected by the	Approved by the
Regulatory Equity at the beginning of the year	2,494.55	2,527.27
Equity portion of capitalisation during the year	556.46	338.08
Reduction in Equity Capital on account of retirement / replacement of assets	-	-
Regulatory Equity at the end of the year	3,051.01	2,865.35
Return on Equity Computation		
Return on Regulatory Equity at the beginning of the	349.24	353.82
Return on Regulatory Equity addition during the year	38.95	23.67
Total Return on Equity	388.19	377.48

The Commission, accordingly, approves the Return on Equity for FY 2023-24 as detailed in the table above.

5.2.7. Income Tax

Petitioner's submission:

The Petitioner has projected the Income Tax at **Rs. 46.47 Crore** based on the actual tax paid for FY 2021-22 and in proportion to the PBT of TPL-D (A).

Commission's analysis:

The Commission has approved Rs. 46.27 Crore towards income tax in true up for FY 2021-22. The Commission, accordingly, in terms of regulation 41.1 has considered **Rs. 46.27 Crore** towards income tax for FY 2023-24 subject to true up based on the actual



tax paid for the relevant year as specified in regulation 41.2 of the GERC (MYT) Regulations, 2016.

5.2.8. Bad Debts Written Off

Petitioner's submission:

The Petitioner has projected bad debts of **Rs. 4.69 Crore** based on the trend of amount written off in previous years.

Commission's analysis:

Regulation 94.9 of the GERC (MYT) Regulations, 2016 specify that bad debts written off may be allowed as a pass through in the ARR subject to prudence check based on the trend of write off of bad debts in the previous years. The Commission has approved Rs. 4.69 Crore towards bad debts written off for FY 2021-22 in truing up based on the available audited annual accounts for FY 2021-22. The Commission, accordingly, has considered bad debts written off at **Rs. 4.69 Crore** for FY 2023-24.

5.2.9. Contingency Reserve

Petitioner's Submission:

The Commission had allowed contingency reserve of Rs. 0.60 Crore for each year of the control period to meet the requirement of unexpected emergent circumstances. Accordingly, the Petitioner has considered the approved values and prayed to the Commission to allow the same for FY 2023-24.

Commission's Analysis:

The proposed contingency reserve is consistent with the GERC (MYT) Regulations, 2016. Accordingly, the Commission approves Rs. 0.60 Crore towards contingency reserve for FY 2023-24.

5.2.10. Interest on Working Capital

Petitioner's submission:



The interest on working capital is computed as per the MYT Regulations, 2016. The

interest rate, being the SBI MCLR rate on 1st April, 2021 plus 250 basis points, of 9.50% is to be applied on the working capital requirement arrived at in accordance with the Regulations. The estimate of interest on working capital is shown in the table below for the approval of the Hon'ble Commission. The Petitioner has computed the working capital requirement and interest on working capital as shown in the table below.

Table 5.20: Interest on Working Capital projected by TPL-D (A) for FY 2023-24 (Rs. Crore)

Particulars	Projected by the petitioner
O&M expenses	35.32
Maintenance Spares	87.49
Receivables	566.18
Working Capital requirement	688.98
Less: Amount held as security deposit from Distribution System Users	1,035.82
Total Working Capital	-
Interest Rate (%)	9.50%
Interest on Working Capital	-

Commission's analysis:

As per the working capital requirement as specified in Regulation 40.4 and 40.5 of the GERC (MYT) Regulations, 2016 read in conjunction with the GERC MYT (First Amendment) Regulations, 2016 based on the O&M expenses and other expenses as approved above and after considering the security deposit amount available during the year and the rate of interest on working capital has been considered as 9.50% considering SBI MCLR as on 01.04.2022 (7.00% plus 250 basis points), the working capital and interest thereon for FY 2023-24 calculated in table below:

Table 5.21: Interest on Working Capital approved for FY 2023-24 (Rs. Crore)

Particulars	Projected by the petitioner	Approved by the Commission
O&M expenses	35.32	35.32
Maintenance Spares	87.49	87.49
Receivables	566.18	507.56



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

Particulars	Projected by the petitioner	Approved by the Commission
Working Capital requirement	688.98	630.37
Less: Amount held as security deposit from Distribution System Users	1,035.82	1,035.82
Total Working Capital	-	-
Interest Rate (%)	9.50%	9.50%
Interest on Working Capital	-	-

The Commission, accordingly, approves interest on working capital as NIL for FY 2023-24.

5.2.11. Non-Tariff Income

Petitioner's Submission:

The Petitioner has projected Non-Tariff Income at Rs. 55.15 Crore for FY 2023-24 based on the current trend and stated that variation in actual non-tariff income except bad debt recovery shall be considered as uncontrollable during truing up exercise. The Petitioner has requested the Commission to approve the non-tariff income for FY 2023-24 as estimated.

Commission's Analysis:

The Commission in the Tariff Orders had approved Non-Tariff Income for ensuing years equal to the actual Non-Tariff Income approved in the latest True-up. The Commission, accordingly, approves the Non-Tariff Income at **Rs. 55.21** Crore for FY 2023-24 subject to true-up.

5.2.12. Aggregate Revenue Requirement (ARR) for FY 2023-24

Petitioner's submission:

The Petitioner has projected the ARR for FY 2023-24 as given in the table below:

Table 5.22: ARR projected by the Petitioner for FY 2023-24 (Rs. Crore)

Particulars	Projected by the Petitioner



Particulars	Projected by the Petitioner
Power Purchase Expenses	5,343.09
Operation & Maintenance Expenses	423.86
Depreciation	364.04
Interest Expenses	234.29
Interest on Security Deposit	44.02
Interest on Working Capital	-
Bad Debts written off	4.69
Contribution to contingency reserves	0.60
Total Revenue Expenditure	6,414.60
Return on Equity Capital	388.19
Income Tax	46.47
Aggregate Revenue Requirement	6,849.26
Less: Non Tariff Income	55.15
Less: Income from Other Business	-
Aggregate Revenue Requirement	6,794.11

Commission's analysis:

The Commission based on the costs/expenses approved in the preceding paragraphs has computed the ARR as given in the Table below:

Table 5.23: ARR approved in respect of TPL-D (A) for FY 2023-24 (Rs. Crore)

Particulars	Approved by the Commission
Power Purchase Expenses	4,730.89
Operation & Maintenance Expenses	423.86
Depreciation	347.50
Interest Expenses	170.64
Interest on Security Deposit	44.02
Interest on Working Capital	-
Bad Debts written off	4.69
Contribution to contingency reserves	0.60
Return on Equity Capital	377.48
Income Tax	46.27
Less: Non-Tariff Income	55.21
Aggregate Revenue Requirement	6,090.74



5.2.13. Revenue from Sale of Power

Petitioner's submission:

The Petitioner has projected the revenue from sale of power at **Rs. 6937.24 Crore** for FY 2023-24 considering the sales at existing tariff rates for different category of consumers. It is further submitted that the revenue from sale of power arrived at with existing tariff includes the revenue **from FPPPA Charges at Rs.3.24 per unit**.

Commission's analysis:

In order to balance the interest of all stakeholders and to recover the cumulative gap of earlier years' and carrying cost, the Commission decides to revise and approve the base FPPPA for FY 2023-24 @ Rs. 2.71/kWh. Accordingly, the Commission considers the Revenue from sale of power at Rs. 6,523.21 Crore for FY 2023-24 with existing tariff i.e. as applicable for each category of consumer (slab-wise) as per the tariff (including FPPPA charge @2.71/Unit), after considering Rs. 11.52 Crore revenue towards Open Access Charges, as projected/estimated by the Petitioner.

5.2.14. Trued up net Revenue Gap/(Surplus) of FY 2021-22

The Commission has approved the net revenue gap in true up for FY 2021-22 including the gains/ losses shared on account of controllable and uncontrollable factors in accordance with Regulation 23 and 24 of the GERC (MYT) Regulations, 2016. The Commission has also considered earlier years approved gap and also impact on ARR due to review petition of the Petitioner, which is mentioned in the previous Chapter. It is found that the Commission has calculated/computed an amount of Rs. 380.15 Crore as Gap for the TPL-D(A) for FY 2021-22.

Regulation 21.6 (c) of the MYT Regulations, 2016 specify that carrying cost is to be allowed on the amount of revenue gap / (surplus) for the period from the date on which such gap / (surplus) has become due, calculated on the simple interest basis at the weighted average SBI Base Rate for the relevant year, subject to prudence check and submission of documentary evidence for having incurred the carrying cost in the



years prior to the year in which the which revenue gap is addressed.

As stated above, the Gap approved for true-up of FY 2021-22 is Rs. 380.15 Crore and the related carrying cost @ 7.00% for two years is worked out as Rs. 53.22 Crore.

The Commission, accordingly, will consider the trued-up Revenue Gap of Rs. 433.37 Crore for FY 2021-22 which is inclusive of carrying cost. The same will consider for determination of tariff for FY 2023-24.

5.2.15. Revenue Gap/(Surplus) for FY 2023-24

The Commission has approved the ARR at Rs. 6090.74 Crore and also considers the Revenue from sale of power at Rs. 6,523.21 Crore for FY 2023-24 with existing tariff i.e. as applicable for each category of consumer (slab-wise) as per the tariff (including FPPPA charge @2.71/Unit), after considering Rs. 11.52 Crore revenue towards Open Access Charges. The Commission has considered DSM expenses at Rs. 0.22 Crore which reflected in the Audited Accounts of FY 2021-22.

The Commission has approved revenue gap of Rs. 433.37 Crore for FY 2021-22 after considering the Carrying cost, which is elaborated in the above sections.

The Commission accordingly computed the revenue Gap/(Surplus) for FY 2023-24 as given in the table below:

Table 5.24: Revenue Gap / (Surplus) approved for FY 2023-24 (Rs. Crore)

Particulars	Projected by Petitioner	Approved by the Commission
Aggregate Revenue Requirement	6,794.11	6,090.74
Revenue at existing tariff @ 3.24/2.71	6,937.24	6,511.69
Revenue from open access	11.52	11.52
Revenue Gap /(Surplus) for FY 23-24	-154.66	-432.47
Gap/(Surplus) carried from FY 2021-22	380.41	380.15
Carrying cost on gap for FY 2021-22	73.24	53.22
DSM	0.22	0.22
Net Gap/(Surplus)	299.20	1.12



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

Accordingly, the Commission arrives estimated gap amounting to Rs. 1.12 Crore as against Rs. 299.20 Crore as proposed by the Petitioner for FY 2023-24.



6. Compliance of Directives

6.1. EARLIER DIRECTIVES

Directive: Long-term Power Procurement Plan along-with RPO Commitments:

The Commission has directed the Petitioner to carry out a detailed study of the load growth and power requirement for the next decade and accordingly strategy to meet the requirement from conventional and RE sources.

Compliance

The Petitioner submitted that presently, RE Developers are evaluating various options to offer RE Power with certainty using various options including Storage so as to deal with uncertainty and/ or intermittency of RE Power.

The Petitioner is evaluating available options to make necessary tie-up with a view to reduce the cost while avoiding the issue of Intermittency of RE Power. Regarding RPO fulfilment, the Petitioner has tied up 450 MW solar through bidding process for fulfilment of RPO. The Petitioner will update the Hon'ble Commission based on development of same.

Commission's Comment

The Commission has noted the submission of the Petitioner.

Directive: Implementation of Smart pre-payment meter/ pre-payment meters

The Commission has directed TPL-D to participate in the scheme of switching over to smart pre-payment meters, which will help in improvement of metering, billing and collection.

Compliance:

The Petitioner submitted that as per the existing Revamped Distribution Sector Scheme, private sector is not permitted to avail benefits under the Scheme. In turn,



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

the Petitioner has written to the Ministry of Power to permit the private sector to avail benefits of the scheme and to provide financial support for implementing prepaid metering/ smart prepaid metering. However, there is no further update in the matter.

Commission's Comment

The Commission has noted the submission of the Petitioner.



7. Fuel and Power Purchase Price Adjustment

7.1. Fuel Price and Power Purchase Price Adjustment

The Commission in Case No. 1309 of 2013 and 1313 of 2013 vide its order dated 29th October, 2013 has revised the formula for Fuel Price and Power Purchase Cost Adjustment (FPPPA) as mentioned below:

7.2. Formula

FPPPA = [(PPCA-PPCB)]/ [100-Loss in %]

Where,

PPC	is the average power purchase cost per unit of delivered energy
Α	(including transmission cost), computed based on the operational
	parameters approved by the Commission or principles laid down in the
	power purchase agreements in Rs./kWh for all the generation sources as
	approved by the Commission while determining ARR and who have supplied
	power in the given quarter and transmission charges as approved by the
	Commission for transmission network calculated as total power purchase
	cost billed in Rs. Million divided by the total quantum of power purchase in
	Million Units made during the quarter.
PPCB	is the approved average base power purchase cost per unit of delivered
	energy (including transmission cost) for all the generating stations
	energy (including transmission cost) for all the generating stations considered by the Commission for supplying power to the company in
	considered by the Commission for supplying power to the company in
	considered by the Commission for supplying power to the company in Rs./kWh and transmission charges as approved by the Commission
	considered by the Commission for supplying power to the company in Rs./kWh and transmission charges as approved by the Commission calculated as the total power purchase cost approved by the Commission in
Loss in %	considered by the Commission for supplying power to the company in Rs./kWh and transmission charges as approved by the Commission calculated as the total power purchase cost approved by the Commission in Rs. Million divided by the total quantum of power purchase in Million Units



a particular quarter or actual weighted average in Transmission and Distribution losses (%) for four DISCOMs / GUVNL and TPL of the previous year for which true-up have been done by the Commission, whichever is lower.

7.2.1. Base Price of Power Purchase (PPCB)

The Commission has approved the total energy requirement and the total Power Purchase Cost for TP`L-D including fixed cost, variable cost, etc. from the various sources for FY 2023-24 in this Order as given in the Table below:

Table 7.1: Approved power purchase cost per unit for FY 2023-24

Particulars	Total Energy Requirement (MU)	Approved Power Purchase Cost (Rs. Crore)	Power Purchase Cost/Unit (Rs./kWh)
FY 2023-24	12,217.45	6778.99	5.55

Thus, the base Power Purchase cost for TPL-D is Rs. 5.55/kWh for FY 2023-24.

As the Base Power Purchase Price (PPCB) of Rs. 4.88 per Unit in FY 2022-23 has been increased to Rs. 5.55 per Unit for FY 2023-24, Accordingly, the Base FPPPA charge is shifted from Rs. 2.02 per Unit to Rs. 2.71 per Unit (after netting off with T&D losses). Therefore, the Commission has decided to approve the Base FPPPA charges at Rs. 2.71 per Unit for TPL-D (A'bad) in FY 2023-24 against the base FPPPA projected by the Petitioner to the tune of Rs. 3.24 per Unit.

The Petitioner has submitted that looking at the fluctuation in fuel cost, automatic pass through of 10 paise per unit is not sufficient which results into substantial backlog in recovery and additional burden on the end consumers. Taking into cognizance of delay in approval of incremental fuel cost under the present mechanism and consequent delay in recovery of revenue, the Mistry of Power has vided its communication dated 09.11.2021 directed the State Commissions to consider automatic pass through of additional fuel cost in tariff without any delay. While doing so, the Ministry of Power has also considered the grave circumstances



witnessed by the power sector including issues of availability of fuel namely coal and gas for power plants, spike in prices in of coal and gas in the international markets as well as the need for all stake holders in the value chain of power sector to recover cost in a timely fashion and the revenue constraints faced by the distribution companies. In view of above, it has requested to consider Automatic pass through of FPPPA without any delay. In the alternative, the Petitioner has further requested the Commission to consider automatic passthrough of at least 20 paise per unit in the interregnum.

The Commission has noted the submission of the Petitioner. The Commission will take due consideration of the communication dtd. 09.11.2021 of the Mistry of Power, Gol at the time of framing Draft GERC (MYT) Regulations for 4th Control Period, which is under process. In the meantime, the Commission has a view that it will continue with the existing mechanism.

Information regarding FPPPA recovery and the FPPPA calculation shall be kept on the website of TPL.

For any increase in FPPPA, worked out on the basis of above formula, beyond ten (10) paise per kWh in a quarter, prior approval of the Commission shall be necessary and only on approval of such additional increase by the Commission, the FPPPA can be billed to consumers. FPPPA calculations shall be submitted to the Commission within one month from end of the relevant quarter.



8. Wheeling Charges and Cross Subsidy Surcharge

8.1. Wheeling Charges

Petitioner's submission:

The Petitioner has submitted that Regulation 87 of the GERC (MYT) Regulations, 2016 stipulates that the ARR be segregated as per the allocation matrix for segregation of expenses between Distribution Wires Business and Retail Supply Business for determination of wheeling charges. The allocation of expenditure to wheeling and retail supply business is based on the consideration that the distribution infrastructure up to the service line is part of the wheeling business and the distribution infrastructure from service line to consumer premises is a part of the retail supply business.

The allocation matrix as specified by the Commission for segregation of expenses between Wires and Supply business is as shown in the Table below:

Table 8.1: Allocation Matrix for segregation of Wheeling and Retail Supply submitted by the Petitioner for FY 2023-24

Particulars	Wire Business (%)	Retail Business (%)
Power Purchase Expenses	0%	100%
Employee Expenses	60%	40%
A&G Expenses	50%	50%
R&M Expenses	90%	10%
Depreciation	90%	10%
Interest on Long Term Loans	90%	10%
Interest on Working Capital and Security Deposit	10%	90%
Bad Debts Written off	0%	100%
Income Tax	90%	10%
Contribution to Contingency Reserve	100%	0%
Return on Equity	90%	10%
Non-Tariff Income	10%	90%

Based on the above allocationmatrix TPL-D (A) has segregated the RR of Ahmedabad Supply Area for Wires and Supply business as under:



Table 8.2: Segregation of ARR into Wires and Supply Business for FY 2023-24 (Rs. Crore)

Particulars	Wire Business	Retail Business
Power Purchase Expenses	-	5343.09
Employee Expenses	105.99	70.66
A&G Expenses	55.68	55.68
R&M Expenses	122.23	13.58
Depreciation	327.64	36.40
Interest & Finance Charges (incl SD)	215.27	23.43
Interest on Working Capital	-	-
Bad Debts written off	-	4.69
Income Tax	41.83	4.65
Contribution to contingency reserves	0.60	-
Return on Equity Capital	349.37	38.82
Non Tariff Income	5.52	49.64

The Petitioner has submitted that the above segregated ARR has been considered to determine the Wheeling Charges and Cross-Subsidy Surcharge for FY 2023-24.

Commission's analysis:

The Commission, in order to compute the Wheeling Charges and Cross-Subsidy Surcharge, has considered the allocation matrix between the Wheeling and Retail Supply Business as per the GERC (MYT) Regulations, 2016.

Based on the ARR approved by the Commission, the allocation matrix thereof as provided in the GERC (MYT) Regulation, 2016, the ARR approved for Wires and Retail Supply Business for FY 2023-24 is shown in the table below:

Table 8.3: Approved Segregation of ARR into Wires and Supply Business for FY 2023-24 (Rs. Crore)

Particulars	Wire Business	Retail Business
Power Purchase Expenses	-	4,730.89
Employee Expenses	105.81	70.54
A&G Expenses	55.85	55.85
R&M Expenses	122.23	13.58
Depreciation	312.75	34.75
Interest Expenses	153.58	17.06
Interest on SD	39.62	4.40
Interest on Working Capital	-	-
Bad Debts written off	-	4.69
Income Tax	41.65	4.63
Contribution to contingency reserves	0.60	-



Particulars	Wire Business	Retail Business
Return on Equity Capital	339.73	37.75
Non-Tariff Income	5.52	49.69

8.1.1. Determination of Wheeling Charges

Petitioner's submission:

The Petitioner has submitted that the GERC (MYT) Regulations, 2016 specifies that the Wheeling Charges shall be determined based on the ARR allocated to the Wheeling Business. The Petitioner has computed the Wheeling Charges based on the allocation of ARR of distribution business, in accordance with the GERC (MYT) Regulations, 2016.

The Petitioner submitted that Distribution Wires are identified as carrier of electricity from generating station or transmission network to consumer point. The consumption at a particular voltage level requires network at that voltage level and also at all higher voltage levels. Thus, consumption at the lower voltages should contribute to the cost of the higher voltage levels also. However, the consumers connected to the higher voltages would not be utilizing the services of the lower voltage level and hence, would not be required to contribute to the recovery of cost of lower voltage level.

Based on the above approach, the ARR for the Wheeling Business has been apportioned to HT and LT voltage in two steps as under:

- Apportioning the ARR of Wheeling Business to HT and LT voltage level based on ratio of GFA;
- Apportioning the ARR of the HT voltage level again between HT and LT voltage level based on respective contribution in the system peak demand.

The ARR is apportioned between the HT and LT Voltage level in proportion to the ratio of the closing GFA for FY 2021-22. Further, the HT voltage level ARR is further proposed to be segregated between HT and LT voltage levels.



The GFA (excluding assets related to retail supply) for Ahmedabad & Gandhinagar Supply Area as on 31st March, 2022 is Rs 6,091.45 Crore. In case of Ahmedabad & Gandhinagar Supply Area, the GFA identified for HT & LT business are Rs. 3,847.48 Crore & Rs. 2,243.97 Crore, respectively. The ratio of HT assets to LT assets is 63:37, which is considered for the apportionment of ARR for the wheeling business into HT and LT businesses.

Further as the HT level assets cater to the requirement of customers at both HT and LT levels, the ARR for HT is again apportioned between HT and LT voltage based on their ratio of contribution to the peak.

The system peak demand for Ahmedabad and Gandhinagar Supply Area for the year FY 2021-22 was 1,646 MW. In case of Ahmedabad & Gandhinagar Supply Area, the contract demand for all the HT consumers is about 808.86 MW. Assuming that 85% of the contract demand of HT consumers (i.e. 687.53 MW) contributes to the system peak demand, the total demand of LT contributing to the system peak is computed as 958.47 MW.

To determine the wheeling charges for the HT & LT voltage levels, the ARR of the respective voltage level is divided by the sales handled at the respective voltage level. Accordingly, the wheeling charges determined in terms of Rs/kWh/Month has been tabulated as below:

Table 8.4: Wheeling Charges proposed by TPL-D (A) for FY 2023-24

Particulars	Value
First level segregation of ARR (Rs. Crore)	
HT Voltage	766.22
LT Voltage	446.88
Total	1,213.10
Second level segregation of ARR (Rs. Crore)	
HT Voltage	320.05
LT Voltage	893.06
Total	1,213.10
Wheeling Charge in Rs/kW/Month	
HT Voltage	387.92
LT Voltage	776.46
Wheeling Charge in Rs/kWh	



Particulars	Value
HT Voltage	1.53
LT Voltage	1.49
Wheeling Charge in Rs. Crore/MW	
HT Voltage	0.47
LT Voltage	0.93

The Petitioner has further submitted that an open access consumer will also have to bear the following wheeling losses in addition to the wheeling charges:

Table 8.5: Proposed Wheeling Losses for TPL-D (A) for FY 2023-24

Category	Loss %
HT Category	4.00%
LT Category	6.70%

Commission's analysis:

The Commission has determined the ARR of the Wires Business for FY 2023-24 in the earlier section, as Rs.1166.29 Crore.

The ARR is apportioned between the HT and LT Voltage level in the ratio of 63:37, which is the ratio of GFA of HT: LT for FY 2021-22.

The system peak demand for TPL-D (A) for FY 2021-22 was 1646 MW. The contract demand for all the HT consumers is about 808.86 MW. Assuming that 85% of the contract demand of HT consumers contributes to the system peak demand, the HT demand contributing to the system peak works out to 687.53 MW. The balance contribution to the system peak has been considered against LT demand, which works out to 958.47 MW.

To determine the Wheeling Charges for the HT and LT voltage levels, the ARR of the respective voltage level is divided by the sales handled at the respective voltage level. Accordingly, the Wheeling Charge determined in terms of Rs/kWh is shown in the table below:



Table 8.6: Wheeling Charges for TPL-D (A) for FY 2023-24

Particulars	Approved by Commssion
First Level Segregation of ARR (in Rs. Crore)	
HT Voltage	734.76
LT Voltage	431.53
Total	1166.29
Second Level Segregation of ARR (in Rs. Crore)	
HT Voltage	487.16
LT Voltage	679.13
Total	1166.29
Wheeling Charge (in Rs/kWh)	
HT Voltage	2.32
LT Voltage	1.12

The Commission has accordingly approved the wheeling charges for HT and LT voltages as shown in the Table above.

The Commission approves the following losses for Open Access consumers in addition to the Wheeling Charges:

Table 8.7: Wheeling Losses approved for Open Access consumers for TPL-D (A)

Category	Wheeling Losses (%)
HT Category	4.00%
LT Category	5.39%

8.2. Cross Subsidy Surcharge

Petitioner's submission:

The Petitioner has submitted that as per the principles enunciated in the amendment in the National Tariff Policy, the cross-subsidy surcharge is to be computed based on Pooled Power Purchase cost. Further, the principles laid out in the Tariff Policy amply clarify to compensate the distribution licensee for the existing level of cross-subsidization.

The Petitioner has proposed the cross subsidy for HTMD-1, HTMD-2 and HTMD-Metro category consumer as shown in the Table below.



Table 8.8: Proposed Cross Subsidy Surcharge payable for Open Access Consumers in TPL-D (A) for FY 2023-24

Particulars	HTMD-1	HTMD-2	HTMD-Metro
T-Tariff in Rs./kWh	9.54	9.29	8.50
PPC-Average Cost of Power Purchase (Rs./kWh)	6.36	6.36	6.36
Avg W-Average Wheeling Charges (Rs./kWh)	1.53	1.53	1.53
Cross-Subsidy Surcharge (Rs./kWh)	1.66	1.40	0.61

Particulars	RGP	Non-RGP	LTMD-I	LTMD-II	GLP
T-Tariff in Rs./kWh	7.85	9.52	9.60	9.95	8.37
PPC-Average Cost of Power					
Purchase (Rs./kWh)	6.54	6.54	6.54	6.54	6.54
Avg W-Average Wheeling					
Charges (Rs./kWh)	1.49	1.49	1.49	1.49	1.49
Cross-Subsidy Surcharge					
(Rs./kWh)	-	1.49	1.57	1.92	0.34

Note: * Including Regulatory Charge

Commission's analysis:

The Hon'ble APTEL in its judgement on the issue of formula for calculation of Cross-subsidy has endorsed the use of the formula depicted in the Tariff Policy. The Central Government has issued Tariff Policy, 2016 wherein the formula for Cross Subsidy Surcharge is given as under;

$$S = T - [C / (1 - L/100) + D + R]$$

Where,

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation



D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets

Further, the Tariff Policy, 2016 also stipulates that the surcharge shall not exceed 20% of the tariff applicable to the category of consumers seeking Open Access.

The Commission has considered the average tariff rate for HTMD-1, HTMD-2 & HT-Metro as per the existing tariff.

Accordingly, the Commission has determined the Cross-Subsidy Surcharge based on the formula stipulated in the Tariff Policy, as shown in the Table below:

Table 8.9: Approved Cross Subsidy Surcharge payable for open access consumers in TPL-D (A) for FY 2023-24

Particulars	HTMD-1	HTMD-2	HTMD-Metro
T-Tariff in Rs./kWh	8.64	9.11	7.60
C - Wt. Avg. Power Purchase Cost (Rs./kWh)	5.55	5.55	5.55
D - Wheeling Charges (Rs./kWh)	2.32	2.32	2.32
L – Loss for HT Category (in %)	4.00%	4.00%	4.00%
R - per unit cost of carrying Regulatory Assets (Rs./kWh)	-	-	-
S = Cross Subsidy Surcharge (Rs./kWh)	0.54	1.00	-0.51

Particulars	RGP	Non-RGP	LTMD-I	LTMD-II	GLP
T-Tariff in Rs./kWh	6.95	8.62	8.70	9.05	7.47
C - Wt. Avg. Power Purchase Cost (Rs./kWh)	5.55	5.55	5.55	5.55	5.55
D - Wheeling Charges (Rs./kWh)	1.12	1.12	1.12	1.12	1.12
L – Loss for HT Category (in %)	5.39%	5.39%	5.39%	5.39%	5.39%
R - per unit cost of carrying	-	-	-	-	-



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

Particulars	RGP	Non-RGP	LTMD-I	LTMD-II	GLP
S = Cross Subsidy Surcharge (Rs./kWh)	-0.04	1.63	1.71	2.06*	0.48

^{*20%} of Applicable tariff for LTMD-II is Rs. 1.81/kWh

However, the Tariff Policy, 2016 provides that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access. Hence, the aforesaid surcharge is restricted to 20% of tariff applicable to that category. (Added)

Thus, Cross Subsidy Surcharge as per formula in Tariff Policy, 2016 works out to Rs.0.54/kWh for HTMD-1, Rs.1.00/kWh for HTMD-2, NIL for HT-Metro, NIL for RGP, Rs. 1.63/kWh for Non-RGP, Rs. 1.71/kWh for LTMD-I, Rs. 1.81/kWh for LTMD-II and Rs. 0.48/kWh for GLP.

8.3. Additional Surcharge

Petitioner's submission:

The Petitioner has submitted that as per Regulation 25 of the GERC (Terms & Conditions of Intra-State Open Access) Regulations, 2011, the OA consumer will also be required to pay an Additional Surcharge as per Section 42 (4) of the Electricity Act, 2003.

Commission's analysis:

The Petitioner should submit the requisite data and justification separately for determination of Additional Surcharge.



9. Tariff Philosophy and Tariff Proposals

9.1. Introduction

The Commission is guided by the provisions of the Electricity Act, 2003, the National Electricity Policy, the Tariff Policy, the Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and GERC (MYT) Regulations, 2016 notified by the Commission.

Section 61 of the Act lays down the broad principles and guidelines for determination of retail supply tariff. The basic principle is to ensure that the tariff should progressively reflect the cost of supply of electricity and reduce the cross subsidy amongst categories within a period to be specified by the Commission.

9.2. Proposal of TPL for increase in Retail Tariffs for TPL-D (A) for FY 2023-24

Background

The Petitioner has submitted that the cumulative (gap)/surplus for FY 2021-22, FY 2023-24 and carrying cost are computed as detailed in the earlier chapters. The Petitioner has proposed to:

- Recover the accumulated (gap)/surplus by way of regulatory charge of Rs. 0.37
 per unit over a period of two years.
- Recover the Gap/carrying cost for matters pending with the Commission/ APTEL
 by a way of regulatory charge along with the FPPPA ceiling of Rs. 3.24 per unit.

Tariff Philosophy

The Petitioner has submitted that the Commission has approved the existing tariff structure based on widely recognized best practices in accordance with the legal framework as detailed hereunder:

- A. Consumers' capacity to pay
- B. Principles of cross subsidy prescribed by Tariff Policy
- C. Incentivising energy conservation



- D. Demand Side Management
- E. Promotion of efficient use of electricity

The Petitioner has also submitted that same tariff structure and philosophy is maintained while designing the tariff for FY 2023-24.

Determination of Retail Tariff

9.3. Commission's Ruling on Retail Tariffs for TPL-D (A) for FY 2023-24

The Commission has in the past Orders, rationalised the tariffs in order to ensure that the tariffs reflect, as far as possible, the cost of supply. The Commission has also tried to address operational and field issues, keeping in view the interest of the consumers, while rationalising the tariff structure.

TPL-D (A) has proposed to recover cumulative revenue gap of Rs. 299.20 Crore with effect from 1st April, 2023, by way of Regulatory charge at the rate of Rs. 0.37 per unit

However, as discussed earlier, the Commission has approved a cumulative revenue gap of Rs. 1.12 Crore during FY 2023-24 in Chapter 5. However, the revenue gap/surplus may vary while truing up ARR for FY 2023-24, when actuals as per audited annual accounts are available. Therefore, the Commission decides to continue with the existing tariff structure. Accordingly, the category-wise tariff is retained at the same level as approved for FY 2023-24.

9.4. Green Power Tariff

The Petitioner has submitted that it has received representations regarding introduction of "Green Tariff" in its license areas. However, the methodology for determination of "Green Tariff" is required to be determined by the Hon'ble Commission. Hence, for FY 2023-24, the Petitioner proposes "Green Tariff" of Rs. 1.50 per unit.

It is noted that the petitioner has proposed the Green Tariff at the rate of Rs. 1.50 per Unit for FY 2023-24. Considering various aspects, the Commission decides to fix the Green Tariff as additional rate of Rs. 1.50 per Unit for Torrent Power Ltd. (A 'bad &



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

Gandhinagar) license area for FY 2023-24.

- Green Power Tariff of Rs 1.50/ kWh, which is over and above the normal tariff of the
 respective category as per Tariff Order, be levied to the consumers opting for
 meeting their demand of green energy.
- All consumers (Extra High Voltage, High Voltage and Low Voltage) shall be eligible for opting RE power on payment of Green Power Tariff.
- This option can be exercised by consumer giving billing cycle notice to the Distribution Licensee in writing before commencement of billing period.



COMMISSION'S ORDER

The Commission approves the Aggregate Revenue Requirement (ARR) for TPL-D (Ahmedabad) for FY 2023-24 as shown in the Table below:

Approved ARR for TPL-D (Ahmedabad) for FY 2023-24 (Rs. Crore)

Particulars	Approved by the Commission
Power Purchase Expenses	4,730.89
Operation & Maintenance Expenses	423.86
Depreciation	347.50
Interest Expenses	170.64
Interest on Security Deposit	44.02
Interest on Working Capital	-
Bad Debts written off	4.69
Contribution to contingency reserves	0.60
Return on Equity Capital	377.48
Income Tax	46.27
Less: Non Tariff Income	55.15
Aggregate Revenue Requirement	6,090.74

The retail supply tariffs for Ahmedabad distribution area for FY 2023-24 determined by the Commission are annexed to this order.

This order shall come into force with effect from 1st April, 2023.

-Sd-	-Sd-	-Sd-
S. R. Pandey	Mehul M. Gandhi	Anil Mukim
Member	Member	Chairman

Place: Gandhinagar

Date: 31/03/2023



ANNEXURE: TARIFF SCHEDULE

TARIFF SCHEDULE FOR AHMEDABAD - GANDHINAGAR LICENSE AREA OF TORRENT POWER LIMITED - AHMEDABAD

TARIFF FOR SUPPLY OF ELECTRICITY AT LOW TENSION, HIGH TENSION AND EXTRA HIGH TENSION

Effective from 1st April, 2023

GENERAL CONDITIONS

- 1. This tariff schedule is applicable to all the consumers of TPL in Ahmedabad- Gandhinagar area
- 2. All these tariffs for power supply are applicable to only one point of supply.
- 3. Except in cases where the supply is used for purposes for which a lower tariff is provided in the tariff schedule, the power supplied to any consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff.
- 4. The charges specified in the tariff are on monthly basis, TPL shall adjust the rates according to billing period applicable to consumer.
- 5. The various provisions of the GERC (Licensee's power to recover expenditure incurred in providing supply and other miscellaneous charges) Regulations, except Meter Charges, will continue to apply.
- 6. Conversion of Ratings of electrical appliances and equipment from kilowatt to B.H.P. or vice versa will be done, when necessary, at the rate of 0.746 kilowatt equal to 1 B.H.P.
- 7. The billing of fixed charges based on contracted load or maximum demand shall be done in multiples of 0.5 (one half) Horsepower or kilo watt (HP or kW) as the case may be. The fraction of less than 0.5 shall be rounded to next 0.5. The billing of energy charges will be done on complete one kilo-watt-hour (kWh).
- 8. The Connected Load for the purpose of billing will be taken as the maximum load connected during the billing period.
- 9. Contract Demand shall mean the maximum kW for the supply of which TPL undertakes to provide facilities to the consumer from time to time.
- 10. Maximum Demand in a month means the highest value of average kW as the case



may be, delivered at the point of supply of the consumer during any consecutive 15/30 minutes in the said month.

- 11. Payment of penal charges for usage in excess of contract demand/load for any billing period does not entitle the consumer to draw in excess of contract demand/load as a matter of right.
- 12. The fixed charges, minimum charges, demand charges and the slabs of consumption of energy for energy charges mentioned shall not be subject to any adjustment on account of existence of any broken period within billing period arising from consumer supply being connected or disconnected any time within the duration of billing period for any reason.
- 13. The energy bills shall be paid by the consumer within 14 days from the date of billing, failing which the consumer shall be liable to pay the delayed payment charges @15% p.a. for the number of days from the due date to the date of payment of bill.
- 14. Fuel Price and Power Purchase Adjustment (FPPPA) charges shall be applicable in accordance with the formula approved by the Gujarat Electricity Regulatory Commission from time to time.
- 15. Statutory Levies: These tariffs are exclusive of Electricity Duty, Tax on Sales of Electricity, Taxes and other Charges levied/may be levied or such other taxes as may be levied by the Government or other Competent Authorities on bulk/retail supplies from time to time.
- 16. The payment of power factor penalty does not exempt the consumer from taking steps to improve the power factor to the levels specified in the Regulations notified under the Electricity Act, 2003 and TPL shall be entitled to take any other action deemed necessary and authorized under the Act.

17. Green Power Tariff

- Green Power Tariff of Rs 1.50/ kWh, which is over and above the normal tariff of the
 respective category as per Tariff Order, be levied to the consumers opting for
 meeting their demand of green energy.
- All consumers (Extra High Voltage, High Voltage and Low Voltage) shall be eligible for opting RE power on payment of Green Power Tariff.
- This option can be exercised by consumer giving Billing Cycle notice to the



Torrent Power Limited – Distribution, (Ahmedabad) Truing up for FY 2021-22 and Determination of Tariff for FY 2023-24

Distribution Licensee in writing before commencement of billing period.



PART- I

SUPPLY DELIVERED AT LOW OR MEDIUM VOLTAGE

(230 VOLTS- SINGLE PHASE, 400 VOLTS- THREE PHASE, 50 HERTZ)

1. RATE: RGP

This tariff is applicable to supply of electricity for:

- i. residential purpose, and
- ii. Installations having connected load up to and including 15 kW for common services like elevators, water pumping systems, passage lighting in residential premises and pumping stations run by local authorities.

1.1. FIXED CHARGE

For Other than BPL consumers

(a)	Single Phase Supply	Rs. 25 per month per installation
(b)	Three Phase Supply	Rs. 65 per month per installation

For BPL household consumers*

(a) Fixed Charges	Rs. 5 per month per installation
-------------------	----------------------------------

1.2. ENERGY CHARGE

For Other than BPL consumers

(a)	First 50 units consumed per month	320 Paise per Unit
(b)	For the next 150 units consumed per month	395 Paise per Unit
(c)	Remaining units consumed per month	500 Paise per Unit

For BPL household consumers*

(a)	First 50 units consumed per month	150 Paise per Unit
(b)	For remaining units consumed per month	Rate as per RGP



* The consumer who wants to avail the benefit of the above tariff has to produce a copy of the Card issued by the authority concerned at the zonal office of the Distribution Licensee. The concessional tariff is only for 50 units per month.

2. RATE: GLP

Applicable for supply of electricity to 'other than residential' premises used for charitable purposes like: public hospitals, dispensaries, educational and research institutions and hostels attached to such institutions, youth hostels run by Government, religious premises exclusively used for worship or community prayers, electric crematorium etc. Such premises should be in the use of 'Public Trust" as defined under section 2(13) of the Bombay Public Trust Act, 1950.

2.1. FIXED CHARGE

(a)	Single Phase Supply	Rs. 30 per month per installation
(b)	Three Phase Supply	Rs. 70 per month per installation

2.2. ENERGY CHARGE

	(a)	First 200 units consumed per month	410 Paise per Unit
Ī	(b)	Remaining units consumed per month	480 Paise per Unit

3. RATE: NON-RGP

Applicable for supply of electricity to premises which are not covered in any other LT tariff categories, up to and including 15 kW of connected load.

Consumers covered in this category can also opt for tariff rates covered in "Rate: LTMD-2".

3.1. FIXED CHARGE

(a)	For installations having Connected Load up to	Rs. 70 per kW per month
	and including 5 kW	
(b)	For installations having Connected Load more	Rs. 90 per kW per month
	than 5 kW and up to 15 kW	



3.2. ENERGY CHARGE

A flat rate of	460 Paise per Unit

4. RATE: LTP (AG)

Applicable to motive power installations for agricultural purposes

4.1. ENERGY CHARGE

A flat rate of	340 Paise per Unit

4.2. MINIMUM CHARGE

Minimum Charge per BHP of Connected Load	Rs. 10 per BHP per Month
Minimum Charge per BHP of Connected Load	Rs. 10 per BHP per Month

Note:

- 1. The agricultural consumers shall be permitted to utilize one bulb or CFL up to 40 watts in the Pump House. Any further extension or addition of load will amount to unauthorized extension.
- 2. No machinery other than pump for irrigation will be permitted under this tariff.

5. Rate: LTMD-1

Applicable for supply of electricity to installations above 15 kW of connected load used for common services like elevators, water pumping systems and passage lighting for residential purpose and pumping stations run by local authorities.

5.1. FIXED CHARGE

1. For Billing Demand up to and including Contract Demand

(a)	First 50 kW of Billing Demand per month	Rs. 150 per kW
(b)	Next 30 kW of Billing Demand per month	Rs. 185 per kW



(c) Rest of Billing Demand per month	Rs. 245 per kW
--------------------------------------	----------------

2. For Billing Demand in excess of the Contract Demand

Fixed Charge per kW of Billing Demand per month	Rs. 350 Per kW
0 1 1 1	

Note: The Billing Demand will be taken as under:

- i. The Maximum Demand recorded during the month OR
- ii. 85% of the Contract Demand OR
- iii. 6 kW

Whichever is the highest.

5.2. ENERGY CHARGE

(a)	For Billing Demand up to and including 50 kW	465 Paise per unit
(b)	For Billing Demand above 50 kW	480 Paise per unit

5.3. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90% to 95%	Rebate of 0.15 Paise per Unit
For each 1% improvement in the Power Factor above 95%	Rebate of 0.27 Paise per Unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power	Penalty of 3.00 Paise per Unit
Factor below 90%	

6. RATE: LTMD-2

Applicable for supply of electricity to premises which are not covered in any other LT



tariff categories, having above 15 kW of connected load.

This tariff shall also be applicable to consumer covered in category- 'Rate: Non-RGP' so opts to be charged in place of 'Rate: Non-RGP' tariff.

6.1. FIXED CHARGE

A. For Billing Demand up to and including Contract Demand

(a)	First 50 kW of Billing Demand per month	Rs. 175 per kW
(b)	Next 30 kW of Billing Demand per month	Rs. 230 per kW
(c)	Rest of Billing Demand per month	Rs. 300 per kW

B. For Billing Demand in excess of the Contract Demand

Fixed Charge per kW of Billing Demand per month	Rs. 425 Per kW
Fixed Charge per kW of Billing Demand per month	Rs. 425 Per kW

Note: The Billing Demand will be taken as under:

- i. The Maximum Demand recorded during the month OR
- ii. 85% of the Contract Demand OR
- iii. 6 kW

Whichever is the highest.

6.2. ENERGY CHARGE

(a)	For Billing Demand up to and including 50 kW	480 Paise per unit
(b)	For Billing Demand above 50 kW	500 Paise per unit

6.3. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90% to 95%	Rebate of 0.15
	Paise per Unit



For each 1% improvement in the Power Factor above 95%	Rebate of 0.27
	Paise per Unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00
	Paise per Unit

7. <u>RATE: SL</u>

Applicable to lighting systems for illumination of public roads.

7.1. ENERGY CHARGE

A flat rate of	430 Paise per Unit

7.2. OPTIONAL kVAh CHARGE

For all the kVAh units consumed during the month	335 Paise per Unit

8. RATE: TMP

Applicable to installations for temporary requirement of electricity supply.

8.1. FIXED CHARGE

Fixed Charge per Installation	Rs. 25 per kW per Day
-------------------------------	-----------------------

A flat rate of	510 Paise per Unit



9. RATE: LT - Electric Vehicle (EV) Charging Stations

This tariff is applicable to consumers who use electricity **EXCLUSIVELY** for electric vehicle charging installations.

Other consumers can use their regular electricity supply for charging electric vehicle under same regular category i.e. RGP, NRGP, LTMD etc.

9.1. FIXED CHARGE

Rs. 25 per month per installation

PLUS

Energy Charge	420 Paise per Unit



PART- II

SUPPLY DELIVERED AT HIGH VOLTAGE (11000 VOLTS- THREE PHASE, 50 HERTZ)

10. RATE: HTMD-1

Applicable for supply of energy to High Tension consumers contracting for maximum demand of 100 kW and above for purposes other than pumping stations run by local authorities.

10.1. FIXED CHARGE

A. For Billing Demand up to and including Contract Demand

Fixed Charge per kW of Billing Demand per Month for Billing	Rs. 260 per kW
demand up to 1000 kW	
Fixed Charge per kW of Billing Demand per Month for Billing	Rs. 335 per kW
demand 1000 kW and above	

B. For Billing Demand in excess of the Contract Demand

Fixed Charge per kW of Billing Demand per month	Rs. 385 per kW
Fixed Charge per kW of Billing Demand per month	Rs. 385 per kW

Note: The Billing Demand will be taken as under:

- i. The Maximum Demand recorded during the month OR
- ii. 85% of the Contract Demand OR
- iii. 100 kW

Whichever is the highest.

(a)	First 400 units consumed per kW of Billing Demand	455 Paise per unit
	per Month	
(b)	Remaining Units consumed per Month	445 Paise per unit



10.3. TIME OF USE (TOU) CHARGE

For the Consumption during specified hours as mentioned here below:	
(i) For April to October period- 1200 Hrs. to 1700 Hrs. & 1830 Hrs. to 2130 Hrs.	
(ii) For November to March period- 0800 Hrs. to 1200 Hrs. & 1800 Hrs. to 2200 Hrs.	
(a) For Billing Demand up to 300 kW	80 Paise per Unit
(b) For Billing Demand Above 300 kW	100 Paise per Unit

10.4. NIGHT TIME CONCESSION

The energy consumed during night hours between 22.00 hours and 06.00 hours next day recorded by the tariff meter having built in feature of time segments shall be eligible for rebate at the rate of 30 Paise per kWh.

10.5. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90% to 95%	Rebate of 0.15 Paise per Unit
For each 1% improvement in the Power Factor above 95%	Rebate of 0.27 Paise per Unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00 Paise
	per Unit

11. **RATE: HTMD-2**

Applicable for supply of energy to Water and Sewage Pumping Stations run by local authorities and contracting for maximum demand of 100 kW and above.



11.1. FIXED CHARGE

A. For Billing Demand up to and including Contract Demand

Fixed Charge per kW of Billing Demand per Month	Rs. 225 per kW

B. For Billing Demand in excess of the Contract Demand

Fixed Charge per kW of Billing Demand per month Rs. 285 Per kW	Fixed Charge per kW of Billing Demand per month	Rs. 285 Per kW
--	---	----------------

Note: The Billing Demand will be taken as under:

- i. The Maximum Demand recorded during the month OR
- ii. 85% of the Contract Demand OR
- iii. 100 kW

Whichever is the highest.

11.2. ENERGY CHARGE

A flat rate of	410 Paise per unit

11.3. TIME OF USE (TOU) CHARGE

For th	ne Consumption during specified hours as mentioned here	
below	/ -	
(i)	For April to October period- 1200 Hrs. to 1700 Hrs. &	60 Paise per unit
	1830 Hrs. to 2130 Hrs.	oo Paise per unit
(ii)	(ii) For November to March period- 0800 Hrs. to 1200	
	Hrs. & 1800 Hrs. to 2200 Hrs.	

11.4. NIGHT TIME CONCESSION

The energy consumed during night hours between 22.00 hours and 06.00 hours next day recorded by the tariff meter having built in feature of time segments shall be eligible for rebate at the rate of 30 Paise per kWh.



11.5. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90% to 95%	Rebate of 0.15
	Paise per Unit
For each 1% improvement in the Power Factor above 95%	Rebate of 0.27
	Paise per Unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00
	Paise per Unit

12. **RATE: HTMD-3**

This tariff shall be applicable to a consumer taking supply of electricity at high voltage, contracting for not less than 100 kW for temporary period. A consumer not taking supply on regular basis under a proper agreement shall be deemed to be taking supply for temporary period.

12.1. FIXED CHARGE

For billing demand up to contract demand	Rs. 25/- per kW per day		
For billing demand in excess of contract demand	Rs. 30/- per kW per day		

Note: The Billing Demand will be taken as under:

- i. The Maximum Demand recorded during the month OR
- ii. 85% of the Contract Demand OR
- iii. 100 kW

Whichever is the highest.



For all units consumed during the month	705 Paise/Unit

12.3. TIME OF USE (TOU) CHARGE

For	the	Consumption	during	specified	hours	as	
men	tioned	l here below-					
(i)	For	April to Octobe	r period	-1200 Hrs. t	o 1700	Hrs.	60 Paise per unit
& 1830 Hrs. to 2130 Hrs.							
(ii) For November to March period- 0800 Hrs. to 1200							
	Hrs	s. & 1800 Hrs. to	2200 Hrs	5.			

12.4. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90%	Rebate of 0.15 Paise
to 95%	per Unit
For each 1% improvement in the Power Factor above 95%	Rebate of 0.27 Paise
	per Unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00 Paise
	per Unit

13. RATE: HTMD- METRO TRACTION

Applicable for supply of energy to Metro traction, contracting for maximum demand of 100 kW and above.

13.1. FIXED CHARGE

A. For Billing Demand up to and including Contract Demand

Fixed Charge per kW of Billing Demand per Month	Rs. 335 per kW
---	----------------

B. For Billing Demand in excess of the Contract Demand



Fixed Charge per kW of Billing Demand per month	Rs. 385 Per kW

Note: The Billing Demand will be taken as under:

- i. The Maximum Demand recorded during the month OR
- ii. 85% of the Contract Demand OR
- iii. 100 kW Whichever is the highest.

13.2. ENERGY CHARGE

A flat rate of	355 Paise/Unit

13.3. TIME OF USE (TOU) CHARGE

For	the	Consumption	during	specified	hours	as	
ment	tioned	here below-					
(i)	For	April to October	s. &	60 Daisa par unit			
	183	0 Hrs. to 2130 Hr		60 Paise per unit			
(ii)	For	November to Ma	Hrs.				
	& 18	300 Hrs. to 2200	Hrs.				

13.4. NIGHT TIME CONCESSION

The energy consumed during night hours between 22.00 hours and 06.00 hours next day recorded by the tariff meter having built in feature of time segments shall be eligible for rebate at the rate of 30 Paise per kWh.

13.5. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90% to 95%	Rebate of 0.15 Paise per unit
For each 1% improvement in the Power Factor above 95%	Rebate of 0.27 Paise per unit



B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00 Paise
	per unit

14. RATE: NTCT (NIGHT TIME CONCESSIONAL TARIFF)

This is night time concessional tariff for consumers for regular power supply who opt to use electricity EXCLUSIVELY during night hours between 22.00 hours and 06.00 hours next day.

14.1. FIXED CHARGE

Fixed Charges 30% of the Demand Charges under relevant Tariff Category

14.2. ENERGY CHARGE

A flat rate of	350 Paise per unit

14.3. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90%	Rebate of 0.15 Paise
to 95%	per Unit
For each 1% improvement in the Power Factor above 95%	Rebate of 0.27 Paise
	per Unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00 Paise
	per Unit

NOTE:

1. 15% of the contracted demand can be availed beyond the night hours prescribed as per para 14.0 above.



- 2. 10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 14.0 above.
- 3. In case the consumer failed to observe condition no. 1 above during any of the billing month, then demand charge during the relevant billing month shall be billed as per HTMD category demand charge rates given in para 10.1 of this schedule.
- 4. In case the consumer failed to observe condition no. 2 above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per HTMD category energy charge rates given in para 10.2 of this schedule.
- 5. In case the consumer failed to observe above condition no. 1 and 2 both during any of the billing month, then demand charge and entire energy consumption during the relevant billing month shall be billed as per HTMD category demand charge and energy charge rates given in para 10.1 and 10.2 respectively, of this schedule.
- 6. This tariff shall be applicable if the consumer so opts to be charged in place of HTMD tariff by using electricity exclusively during night hours as above.
- 7. The option can be exercised to shift from regular HTMD tariff category to Rate:

 NTCT or from Rate: NTCT to regular HTMD tariff four times in a calendar year by
 giving not less than 15 days' advance notice in writing before commencement of
 billing period.

15. RATE: HT - Electric Vehicle (EV) Charging Stations

This tariff is applicable to consumers who use electricity **EXCLUSIVELY** for electric vehicle charging installations.

Other consumers can use their regular electricity supply for charging electric vehicle under same regular category i.e. HTMD-1, HTMD-2, HTMD-3 & NTCT.



15.1. DEMAND CHARGE

For billing demand up to contract demand	Rs. 25 per kW per
For billing demand in excess of contract demand	Rs. 50 per kW per

PLUS

Energy Charge	410 Paise per Unit

