TARIFF ORDER

Approval of True-up of FY 2020-21, Annual Performance Review of FY 2021-22 and Aggregate Revenue Requirement (ARR) for FY 2022-23 to FY 2024-25 and Determination of Retail Tariff for FY 2022-23

Petition No. 80/2022

for

Electricity Wing of Engineering Department, Chandigarh (EWEDC)

11th July 2022

JOINT ELECTRICITY REGULATORY COMMISSION
For the State of Goa and Union Territories,
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List of abbreviations

Abbreviation	Full Form
A&G	Administrative and General
ACoS	Average Cost of Supply
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal of Electricity
BPL	Below Poverty Line
BBMB	Bhakra Beas Management Board
CAGR	Compound Annualized Growth rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Stations
COD	Commercial Operation Date
Cr	Crores
CREST	Chandigarh Renewal Energy and Science & Technology
CAG	Comptroller and Auditor General of India
CUF	Capacity Utilization Factor
CPI	Consumer Price Index
Discom	Distribution Company
DST	Daylight Savings Time
EWEDC	Electricity Wing of Engineering Department, Chandigarh
DSM	Deviation Settlement Mechanism
EHT	Extra High Tension
ERP	Enterprise Resource Planning
FPPCA	Fuel and Power Purchase Cost Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
GeM	Government e Marketplace
GPF	General Provident Fund
G-TAM	Green- Term ahead market
HT	High Tension
HPO	Hydro Power Obligation
IEX	Indian Energy Exchange Limited
IPP	Independent Power Producer
ISTS	Inter State Transmission System
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
LT	Low Tension
MU	Million Units
MYT	Multi Year Tariff
MNRE	Ministry of New and Renewable Energy
MUNPL	Meja Urja Nigam Private Limited
NFA	Net Fixed Assets
NSGM	National Smart Grid Mission
NIC	National Informatics Centre
NOC	No Objection Certificate
NHPC	National Hydro Power Corporation
NPCL	Noida Power Company Limited
NTI	Non-Tariff Income
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
PCS	Provincial Civil Service
PEPSU	Patiala and East Punjab States Union

PGCIL	Power Grid Corporation of India Limited
PGI	Post Graduate Institute
PLF	Plant Load Factor
PLR	Prime Lending Rate
POSOCO	Power System Operation Corporation Limited
PPA	Power Purchase Agreement
PSEB	Punjab State Electricity Board
PSPCL	Punjab State Power Corporation Limited
R&M	Repair and Maintenance
REC	Renewable Energy Certificate
RLDC	Regional Load Despatch Centre
RoE	Return on Equity
RPO	Renewable Purchase Obligation
SBI MCLR	SBI Marginal Cost Lending Rate
SBI PLR	SBI Prime Lending Rate
SCADA	Supervisory control and data acquisition
SECI	Solar Energy Corporation of India
SERC	State Electricity Regulatory Commission
SJVNL	Satluj Jal Vidyut Nigam Limited
SLDC	State Load Despatch Centre
SOP	Standard of Performance
T&D Loss	Transmission & Distribution Loss
THDC	Tehri Hydro Development Corporation
TOD	Time of Day
UI	Unscheduled Interchange
UT	Union Territory
UT ED	Union Territory Electricity Department
VCoS	Voltage-wise Cost of Supply
WPI	Wholesale Price Index

Before the

Joint Electricity Regulatory Commission

For the State of Goa and Union Territories, Gurugram

QUORUM

Ms. Jyoti Prasad, Member

Petition No. 80/2022

In the matter of

Approval of True-up of FY 2020-21, Annual Performance Review of FY 2021-22 and Approval of Aggregate Revenue Requirements (ARR) for 3rd MYT Control Period from FY 2022-23 to FY 2024-25 and Determination of Retail Tariff for FY 2022-23.

And in the matter of

Electricity Wing of Engineering Department, Chandigarh (EWEDC)..**Petitioner**

ORDER

Dated: 11th July 2022

1) This Order is passed in respect of the Petition filed by the Electricity Wing of Engineering Department, Chandigarh (EWEDC) (herein after referred to as "The Petitioner" or "EWEDC" or "The Licensee") for Approval of True-up of the FY 2020-21, Annual Performance Review for FY 2021-22 and Aggregate Revenue Requirement (ARR) for 3rd MYT Control Period and determination of Retail Tariff for the FY 2022-23 before the Joint Electricity Regulatory Commission (herein after referred to as "The Commission" or "JERC").

2) The Commission scrutinised the said Petition and generally found it in order. The Commission admitted the Petition on 8th April 2022. The Commission thereafter requisitioned further information/ clarifications on the data gaps observed to take a prudent view of the said Petition. The Commission also held a Technical Validation Session to determine sufficiency of data and the veracity of the information submitted. The Public Hearing was held on 13th May 2022, and all the Stakeholders/Electricity Consumers present in the Public Hearing were heard. Further, suggestions/ comments/ views and objections were invited from the Stakeholders and Electricity Consumers.

3) The Commission based on the Petitioner's submission, relevant JERC MYT Regulations, facts of the matter, rules and provisions of the Electricity Act, 2003 and after proper due diligence and prudence check, has approved the Aggregate Revenue Requirement (ARR) for 3rd MYT Control Period and determination of Retail Tariff for the FY 2022-23.

4) A Summary has been provided as follows:

   (a) The Commission has decided not to take up the True-Up for FY 2020-21 due to non-availability of Audited Accounts.

   (b) The following table provides ARR, Revenue and Standalone Gap/ (Surplus) at existing tariff as submitted by the Petitioner and approved by the Commission in APR for the FY 2021-22:

Secretary, JERC
(For Goa & UTs)

Table 1: Standalone Revenue Gap/ (Surplus) at existing tariff for the FY 2021-22 (INR Cr.)

S. No.	Particulars	Petitioner's Submission	Approved by Commission
1	Net Revenue Requirement	824.85	775.60
2	Revenue from Retail Sales at Existing Tariff	685.30	784.13
	Net Revenue Gap/ (Surplus)	**139.55**	**(8.53)**

(c) The following table provides ARR, Revenue and Standalone Gap/ (Surplus) at existing tariff as submitted by the Petitioner and approved by the Commission for the FY 2022-23:

Table 2: Standalone Revenue Gap/ (Surplus) at existing tariff for the FY 2022-23 (INR Cr.)

S. No.	Particulars	Petitioner's Submission	Approved by Commission
1	Net Revenue Requirement	890.77	793.81
2	Revenue from Retail Sales at Existing Tariff	835.29	796.44
	Net Revenue Gap/ (Surplus)	**55.48**	**(2.63)**

(d) Accordingly, the following table provides the cumulative revenue gap/ surplus at existing tariff by the end of FY 2022-23:

Table 3: Cumulative Revenue Gap/ (Surplus) approved by Commission (In INR Cr)

S. No.	Particulars	Formulae	FY 2020-21	FY 2021-22	FY 2022-23
a	Opening Gap /(Surplus)		(151.62)	(225.43)	(252.34)
b	Add: Gap/(Surplus)		(58.01)	(8.53)	(2.63)
c	Closing Gap /(Surplus)	(c=a+b)	(209.63)	(233.97)	(254.97)
d	Average Gap/ (Surplus)	(d=(a+c)/2)	(180.63)	(229.70)	(253.65)
e	Interest Rate on carrying cost (%)		8.75%	8.00%	8.00%
f	Carrying Cost	(f=d*e)	(15.80)	(18.38)	(20.29)
g	**Final Closing Gap/ (Surplus)**	**(c+f)**	**(225.43)**	**(252.34)**	**(275.26)**

(e) The following table provides ARR, Revenue and Standalone Gap/ (Surplus) at approved tariff as approved by the Commission for the FY 2022-23:

Table 4: Standalone Revenue Gap/ (Surplus) at proposed/approved tariff for the FY 2022-23 (INR Cr.)

S. No.	Particulars	Petitioner's Submission	Approved by Commission
1	Net Revenue Requirement	890.77	793.81
2	Revenue from Retail Sales at Approved Tariff	835.29	795.34
	Net Revenue Gap/ (Surplus)	**55.48**	**(1.53)**

(f) Accordingly, the following table provides the cumulative revenue gap/ surplus at approved tariff by the end of FY 2022-23:

Table 5: Cumulative Revenue Gap/ (Surplus) approved by Commission (In INR Cr)

S. No.	Particulars	Formulae	FY 2020-21	FY 2021-22	FY 2022-23
a	Opening Gap /(Surplus)		(151.62)	(225.43)	(252.34)
b	Add: Gap/(Surplus)		(58.01)	(8.53)	(1.53)
c	Closing Gap /(Surplus)	(c=a+b)	(209.63)	(233.97)	(253.87)
d	Average Gap/ (Surplus)	(d=(a+c)/2)	(180.63)	(229.70)	(253.11)
e	Interest Rate on carrying cost (%)		8.75%	8.00%	8.00%
f	Carrying Cost	(f=d*e)	(15.80)	(18.38)	(20.25)
g	**Final Closing Gap/ (Surplus)**	**(c+f)**	**(225.43)**	**(252.34)**	**(274.12)**

Secretary, JERC
(For Goa & UTs)

(g) The Commission observed that the Petitioner had a standalone revenue surplus in each year from FY 2016-17 to FY 2019-20. Further, it is observed that the projected standalone surplus for FY 2022-23 and cumulative revenue surplus till FY 2022-23 at existing tariff is expected to be INR 2.63 Cr and INR 275.26 Cr respectively. Accordingly, the Commission has rationalised the tariff for FY 2022-23.

(h) In view of the same, the Commission approves rationalisation in the retail tariff for existing categories. Even after the changes, the projected standalone revenue surplus at the end of FY 2022-23 is expected to be INR 1.53 Cr and net reduction of tariff is to the tune of around 1%.

(i) The Commission has approved the Average Billing Rate (ABR) of INR 5.18/kWh against the approved Average Cost of Supply (ACoS) of INR 5.17/kWh.

5) This Order shall come into force with effect from 1st July 2022 and shall, unless amended or revoked, continue to be in force till further orders of the Commission.

6) The licensee shall publish the Tariff Schedule and salient features of Tariff as determined by the Commission in this Order within one week of receipt of the Order in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply and also upload the Tariff Order on its website.

7) Ordered accordingly, the attached documents giving detailed reasons, grounds and conditions are an Integral part of this Order.

Sd/-

(Jyoti Prasad)

Member

Place: Gurugram
Date: 11th July 2022

Certified Copy

RKumar.

(Rakesh Kumar)
Secretary, JERC

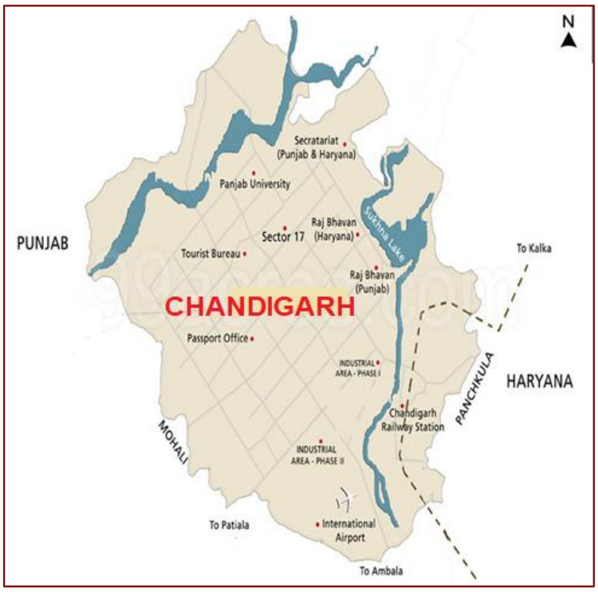
1. Chapter 1: Introduction

1.1. About Joint Electricity Regulatory Commission for the State of Goa and UT's (JERC)

In exercise of powers conferred by the Electricity Act 2003, the Central Government constituted the Joint Electricity Regulatory Commission for all the Union Territories except Delhi to be known as "Joint Electricity Regulatory Commission for the Union Territories" vide notification no. 23/52/2003-R&R dated 2nd May 2005. Later with the joining of the State of Goa, the Commission came to be known as "Joint Electricity Regulatory Commission for the State of Goa and Union Territories" (hereinafter referred to as "JERC" or "the Commission") vide notification no. 23/52/2003-R&R (Vol. II) dated 30th May 2008.

JERC is a statutory body responsible for regulation of the Power Sector in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity etc. Its primary objective includes taking measures conducive to the development of the electricity industry, promoting competition therein, protecting the interests of consumers and ensuring supply of electricity to all areas.

1.2. About Union Territory of Chandigarh



Chandigarh is a city, district and union territory in India that serves as the capital of the two neighbouring states of Punjab and Haryana. It is bordered by the state of Punjab to the north, the west and the south, and by the state of Haryana to the east. The city is unique as it is not a part of either of the two states but is governed directly by the Union Government, which administers all such territories in the country. Chandigarh is located near the foothills of the Shivalik range of the Himalayas in northwest India. It covers an area of approximately 114 km². The metropolitan area of Chandigarh–Mohali–Panchkula collectively forms a Tri-city, with a combined population of over 2 million.

Chandigarh has been rated as one of the "Wealthiest Towns" of India. The city has one of the highest per capita incomes in the country. The city was reported to be one of the cleanest in India based on a national government study. The union territory also heads the list of Indian states and territories according to Human Development Index. In 2020, a survey ranked it among the top 3 happiest cities in India over the happiness index.

1.3. About Electricity Wing of Engineering Department, Chandigarh (EWEDC)

The Electricity Wing of Engineering Department of UT Administration of Chandigarh, hereinafter referred to as 'EWEDC' or as the 'Petitioner', a deemed licensee under Section 14 of the Electricity Act 2003, is carrying out the business of transmission, distribution and retail supply of electricity in Chandigarh (UT). EWEDC is functioning as an integrated distribution licensee of the Union Territory of Chandigarh. EWEDC procures most of its power through its allocation from Central Generating Stations (CGS) such as NTPC, NHPC, NPCIL BBMB, SJVNL and THDC. The EWEDC also buys short-term power for meeting the demand-supply shortfall during peak hours.

Chandigarh has been divided into various sectors and all the sectors of Chandigarh are electrified and any desiring consumer can avail power supply by submitting a requisition in the prescribed form to the appropriate office of the Department subject to fulfillment of the requisite conditions and payment of charges. The EWEDC is under the control of the Administration of the Union Territory of Chandigarh.

The Government of India has announced Aatma Nirbhar Bharat Abhiyan in May, 2020 to make India self-reliant through structural reforms. One of the key reform measures planned is to reform power distribution and retail supply in Union Territories. Accordingly, Ministry of Power convened a meeting on 12th May 2020 through Video Conference in the matter of privatization of power in the UT Chandigarh along with other UTs wherein direction was given to complete the entire process of privatization of Distribution system within the specified timelines.

The UT Administration of Chandigarh after obtaining the approval of the Hon'ble Governor of Punjab-cum-Administrator, UT of Chandigarh conveyed the decision to the Ministry of Power (MoP) for privatization of Electricity Wing of Engineering Department Chandigarh (EWEDC) on 20th May 2020.

Accordingly, the Request for Proposal for sale of 100% share of Electricity Distribution Network and transmission assets at Extra High Voltage (EHV) level as per Electricity Act, 2003, of Electricity Wing of Engineering Department Chandigarh (EWEDC) – Present Licensee was floated.

The Administrative approval & expenditure sanction and in-principle approval of cabinet was sought for Bid process done to select the highest bidder for sale of 100% equity share of the proposed distribution company. Approval is also sought for the formation of the company by the name of Chandigarh Power Distribution Company Limited (CPDCL), in which the assets of the existing Electricity Wing of Engineering Department Chandigarh (EWEDC) shall be transferred.

The Union Cabinet has accorded its approval to the Cabinet Note on dated 7th January 2022. Further, the process of privatisation is underway and change of management is expected in early part of FY 2022-23.

1.4. Multi Year Tariff Regulations, 2018

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018 (hereinafter referred to as 'MYT Regulations, 2018') on 10th August 2018. These Regulations are applicable in the 2nd MYT Control Period comprising of three financial years from FY 2019-20 to FY 2021-22. These Regulations are applicable to all the generation companies, transmission and distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu and Puducherry.

1.5. Multi Year Tariff Regulations, 2021

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 (hereinafter referred to as MYT Regulations, 2021) on 22nd March 2021. These Regulations are applicable in the 3rd MYT Control Period comprising of three financial years from FY 2022- 23 to FY 2024-25. These Regulations are applicable to all the generation companies, transmission and distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry.

1.6. Filing and Admission of the Present Petition

The present Petition was admitted on 8th April 2022 and marked as Petition No. 80 of 2022. The Commission and the Petitioner subsequently uploaded the Petition on their respective websites.

1.7. Interaction with the Petitioner

A preliminary scrutiny/analysis of the Petition was conducted, and certain deficiencies were observed. Accordingly, discrepancy notes were issued to the Petitioner. Further, additional information/clarifications were solicited from the Petitioner as and when required. The Commission and the Petitioner also discussed various concerns of the Petitioner and key data gaps, which included retail sales, revenue from retail tariff, capitalization, tariff proposal etc. The Petitioner submitted its response to the issues through various letters/emails.

The Commission conducted the Technical Validation Session (TVS) with the Petitioner at the Commission's office in Gurugram, during which the discrepancies in the Petition were conveyed and additional information required by the Commission was sought. Subsequently, the Petitioner submitted replies to the issues raised in this session and provided documentary evidence to substantiate its claims regarding various submissions. The following table provides the list of interactions with the Petitioner along with the dates:

Table 6: Timelines of the interaction with the Petitioner

S. No	Subject	Date
1	Issue of First Deficiency Note	13th April 2022
2	Reply received from Petitioner	22nd April 2022 & 4th May 2022
3	Technical Validation Session	6th May 2022
4	Public Hearing	13th May 2022
5	Issue of Second Deficiency Note	17th May 2022
6	Replies received from Petitioner	27th May 2022 & 24th June 2022

1.8. Notice for Public Hearing

Public Notices were published by the Commission in the leading newspapers as tabled below, giving due intimation to the stakeholders, consumers and the public at large about the Public Hearing to be conducted by the Commission. These notices were also uploaded on the Commission's website

Table 7: Details of Public Notices published by the Commission

Sl. No.	Date	Name of Newspaper	Language	Place of Circulation
1	20th April 2022 & 10th May 2022	Ajit	Punjabi	Chandigarh
2		Dainik Jagran	Hindi	Chandigarh
3		The Tribune	English	Chandigarh
4		Hindustan Times	English	Chandigarh

The Public Notice was published by the Petitioner in the following newspapers for inviting objections/ suggestions from the stakeholders on the Tariff Petition:

Table 8: Details of Public Notices published by the Petitioner

S.No.	Date	Name of Newspaper	Language	Place of Circulation
1	21st April 2022	Ajit	Punjabi	Chandigarh
2		Dainik Bhaskar	Hindi	Chandigarh
3		The Tribune	English	Chandigarh
4		Hindustan Times	English	Chandigarh
5	29th April 2022	Ajit	Punjabi	Chandigarh
6		Dainik Bhaskar	Hindi	Chandigarh
7		The Tribune	English	Chandigarh
8		Hindustan Times	English	Chandigarh

1.9. Public Hearing

The Public Hearing was held on 13th May 2022 at the Auditorium Hall, Government Museum and Art Gallery, Chandigarh to discuss the issues related to the Petition filed by the Petitioner. The issues and concerns raised by the stakeholders in writing and as voiced by them during the Public Hearing have been examined by the Commission. The major issues discussed, the responses of the Petitioner thereon and the views of the Commission, have been summarized in Chapter 2 of this Order.

2. Chapter 2: Summary of Suggestions/ Objections received, Response from the Petitioner and the Commission's Views

2.1. Regulatory Process

On admitting the Petition, the Commission directed the Petitioner to make copies of the Petition available to the public, upload the Petition on the website and also publish the same in the newspapers duly inviting comments/ objections from the public as per the provisions of the MYT Regulations, 2021.

The Public Hearing was held at Auditorium Hall, Government Museum and Art Gallery, Chandigarh on 13th May 2022 on the Petition for the True-up of the FY 2020-21, APR of the FY 2021-22, ARR and retail tariff for the FY 2022-23. During the Public Hearing, a few of the stakeholders who had submitted their comments in writing also presented their views in person before the Commission. Other participants from the general public, who had not submitted written comments/objections earlier, were also given an equal opportunity to present their views/suggestions in respect to the Petition. The names of the stakeholders who attended the Public Hearing are provided in Annexure-I.

2.2. Suggestions/ Objections, Response of the Petitioner and Commission's Views

The Commission is appreciative of the efforts of various stakeholders in providing their suggestions/comments/observations to make the Electricity Distribution Sector responsive and efficient. The Commission has noted the concerns of all the stakeholders and has tried to address them to the extent possible in the Chapters on tariff design and directives. Relevant observations have been suitably considered by the Commission while finalizing the Tariff Order. The submissions of the stakeholders, response of the Petitioner and views of the Commission are summarized as follows:

2.2.1. Equal gap in tariff slabs for Domestic Consumers

Stakeholder's Comment:

There is a big gap in tariff between 0-150 units Vs 151-400 units. This is unfair to the domestic consumers. The split up should be increased e.g. 1-100, 101-200, 201-300, etc and there should be an equal gap/increase in tariff between 2 slabs.

Petitioner's Response:

The Tariff structure for EWEDC is approved by the Commission and EWEDC follows the same in to-to.

Commission's View:

The Commission has noted the concerns of the Stakeholder. And the Commission has rationalized the tariff for domestic consumers.

2.2.2. Discrimination of treatment in VIP and Non-VIP areas in Chandigarh

Stakeholder's Comment:

The northern sectors of Chandigarh get preferential treatment in terms of power distribution & maintenance especially areas wherein accommodation for IAS/PCS/HCS officers & judges are located. These areas seldom have outages & even if there are, are very promptly repaired. What are the plans to ensure that non-VIP areas and Southern sectors are not discriminated in such context in the future? There should be better load handling capacities in place for all areas & not just VIP areas.

Petitioner's Response:

There is no special preference given to the Northern sector of Chandigarh and staff is posted to the different parts of the city as per Nos. of connections and areas accordingly. Further, maintenance/repair work in the affected area is being done promptly whenever required.

Commission's View:

The Stakeholder may note the reply of the Petitioner and the Petitioner is directed to cater to the concerns of all consumers with utmost care.

2.2.3. Mandatory installation of solar panels on all houses and apartments

Stakeholder's Comment:

Why are solar panels not being installed by the electricity department on all houses and apartment complexes? There should not be any choice, and these should be mandatorily installed by the electricity department in conjunction with one or more solar power companies and the minimal installation charges added to the electricity bill. As consumers for whom solar panels have been installed are supposed to receive credit/money (based on the amount of solar power generated and sent back to the grid), the installation charges can also be adjusted against the amount being credited back to consumers (for solar power generation).

Petitioner's Response:

Solar plants/panel are being installed by consumers through Nodal Agency Chandigarh Renewal Energy and Science & Technology (CREST) as per policy decision of the Administration.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Nodal Agency CREST has submitted a Petition for approval of business model framework for installation of Grid-connected Rooftop (GCRT) Power Projects for domestic consumer by third party under (Renewable Energy Services Company) RESCO with Build-own-transfer (BOT) model and the same is under process with the Commission.

2.2.4. Overdraw Penalty-kW Basis

Stakeholder's Comment:

It is a Supply Code matter hence may be considered only at the time of amendment of Supply Code. The Commission vide tariff order dated 30th March 2021 has approved that if the sanctioned Contract demand exceeds in case of L.S consumer, such excess shall be charged at an additional rate of Rs. 250/kVA. This amount is not a penalty but an additional amount as specified in the order. Fixed charge as Rs. /kW/month are approved as fixed charges. Contract Demand based tariff for other categories have not been approved/ issued by the Commission till date. Hence fixed charges only on the sanctioned load stand approved. No penalty as proposed by UT ED should be approved for other categories of connection in case excess load has not been used & shown in the metered data. The Commission had already advised the UT ED number of times to provide / replace meters with MDI facility, but licensee has not been able to act upon from the last many years for one reason or the other as itself admitted under 5.2.5 of the Petition. There is no such provision in the Electricity Act to check the installed load as per format where no tempering of meter/ theft of supply is found.

Access to the consumer premises already defined under Sec 163 of the Electricity Act. The Commission has provided in the Supply code 2018 under Sec 5.142 to act as per sec 163 of the EA. There is no provision in the Act to check the load as per format as proposed. Hence, no penalty as proposed by the licensee may be approved as desired under 5.2.7. If approved, corruption in the department is not ruled out.

Petitioner's Response:

The matter has already been taken with Joint Electricity Regulatory Commission (JERC) previously and also through the present Tariff Petition. Any further action can be taken as per direction from the Commission.

Commission's View:

The Commission has noted the submission made by the Stakeholder. The Utility is directed to manage the power by installing MDI feature of Energy Meters as also conveyed vide letter no. RA/3IV/1/2020/422 dated 30th December 2021.

2.2.5. Separate Regulation for recovery of charges

Stakeholder's Comment:

Other charges including miscellaneous charges as proposed in the tariff order relates to Sec. 45 of the Electricity Act as **Power to recover charges.** Therefore, it is suggested that a separate Regulation may be issued for recovery of such charges for the uniformity of such items & rate to all the UT's under the control of the Commission. Presently, the charges are not uniform for all UT's under the Commission.

Petitioner's Response:

No comments.

Commission's View:

Other charges including miscellaneous charges are being approved by the Commission based on prudence check, proposal of the licensee, cost structure of the licensee, geographical conditions, etc since these are different for different utilities under the jurisdiction of the Commission.

2.2.6. Management Information System

Stakeholder's Comment:

UT ED has been sending bills mentioning requisite information as desired under sec Sec.7.7 of Supply Code-2018**.** Presently, in the billing in UT, date of payment of amount with prompt payment rebate is missing though required separately to be provided in each bill as per Supply Code-2018 under Sec 7.7(19) i.e. Due date of payment (separately specified for payment by cash, cheque, credit card / Debit card etc, if necessary) and date of payment with prompt rebate; so it was desired by the Commission to be mentioned on each bill. It is therefore requested to ask the licensee to add accordingly. Further, computerization of office records like posting of applications for new connection/ extension/ reduction/ shifting of connection & further completion of such job is yet to be done by UTED. If the record is also computerized, efficiency of the department can be checked for the service provided to the consumers, licensee & violations of supply code instruction shall be avoided.

Petitioner's Response:

The Computerization of office records for new connection / extension / reduction / shifting of connections are under consideration and will be implemented in future in a periodic manner.

Commission's View:

The Petitioner is directed to expedite the process of Computerization of office records. The Petitioner is further directed to add the Due date of payment (separately specified for payment by cash, cheque, credit card / Debit card, bank transfers, etc., if necessary) and date of payment with prompt rebate to be mentioned on each bill.

2.2.7. Metering / replacement of non-functional defective 11 KV meter

Stakeholder's Comment:

The progress, in this regard is very much slow. Hence, Licensee should be advised for early completion.

Petitioner's Response:

All the field XENs have been directed to replace all the nonfunctional 11 KV meters at the earliest and submission of compliance.

Commission's View:

The concern of the stakeholder is noted. The Commission has taken a serious view of the fact that the Petitioner is yet to ensure full compliance and has discussed the same in the chapter on directives. **The Petitioner is directed to ensure that faulty meters are replaced in a timely manner in accordance with the Supply Code Regulations, 2018 as amended from time to time.**

2.2.8. Energy Audit

Stakeholder's Comment:

The progress, in this regard is very much slow. Hence, Licensee should be advised for early completion.

Petitioner's Response:

The Smart Grid Project is started under the NSGM wherein all the meters alongwith Feeder and DT meter shall be replaced with the Smart Meter and approx. 24149 meters have already been replaced with smart meters and SCADA Centre is also set up for online operation and monitoring of various activities. Also, the smart meters project for whole city is too in pipeline wherein all the feeder and DT meter shall be replaced with smart meters so as to enable the energy audit report. After the replacement of existing electronic/ defective meters with smart meters under the Smart Grid Project the Energy Audit of Electricity Wing of Engineering Department, UT, Chandigarh (EWEDC) shall be prepared.

Commission's View:

The Commission has noted with serious concern that the Petitioner is yet to submit the Energy Audit Reports for previous years despite repeated directions. **The Commission directs the Petitioner to expedite the process and complete the Annual Energy Audit of the UT on priority**.

2.2.9. Assets created from consumer contribution

Stakeholder's Comment:

The progress on this directive is unsatisfactory. In the tariff order dated 30.3.21 it was particularly directed to the licensee by the Commission in Para 2.2.17 to submit the desired information positively along with the next Petition otherwise the commission will consider value based on certain assumptions which will have financial repercussions on the Petitioner ARR. So, action as deem fit may be taken as the UTED has failed to comply with the directive.

Petitioner's Response:

The details of assets created from consumer contribution under EWEDC has been submitted to the Commission for 3rd quarter of FY 2021-22 and is under consideration with the Commission. Any further action as desired by the Commission shall be taken accordingly.

Commission's View:

The Commission notes the suggestions of the stakeholders. The Stakeholder may note the reply of the Petitioner. The Petitioner, despite repeated directions has failed to submit the desired information. Every year the Petitioner submits that the compilation of information is in process. This year, the Petitioner has not provided the complete details of the assets created out of Consumer Contribution. Hence, it is difficult to analyse the actual value of creation of such assets. **The Petitioner in this regard is hereby directed to submit the desired information positively along with the next Tariff Petition** otherwise the Commission will consider the value based on certain assumptions which will have financial repercussions on the Petitioner's ARR.

2.2.10. Monthly billing for Domestic and NRS category of Connection

Stakeholder's Comment:

With regard to Compliance to the Directive 11 of the commission, UT ED has not yet started giving monthly billing stating the reason of conversion of meter reading from bi-monthly to monthly basis due to shortage of staff. The reply of petitioner is not satisfactory. Hence, strict action for compliance of the directive is required by the commission. Due to bi-monthly billing consumers are being forced to pay surcharges @ 4% for the total bill if any consumer is missed to pay the bill by due date even for one day only. UT ED also come to know after 4 months about the nonpayment. For the speedy recovery of departmental dues monthly-billing must be started in the interest of revenue gain of the department & to reduce the defaulting amount. If still the Commission wants to retain the bi-monthly billing surcharge due to late payment should be taken 2% per cycle instead of per month, the interest rate on the principal amount should not be exceeded to the bank rate as presently 24% surcharges are being charged yearly.

Petitioner's Response:

At present, more than 85% consumers (Domestic & Commercial) are billed Bi-Monthly. The conversion of meter reading from Bi-Monthly to Monthly basis will lead to various issues as there is acute shortage of staff i.e MR/BO/Revenue staff etc. Further, the software is also required to be amended for Monthly billing and requirement of necessary stationary as well. After installation of smart meters under the NSGM will help for Monthly billing of all categories of consumers including Domestic and Commercial category.

Commission's View:

The Stakeholder may note the reply of the Petitioner. **The Petitioner is directed to expedite the process and submit the action plan within one month of issuance of this order. However, any delay in collection of bills by the licensee should not be passed on to the consumers.**

2.2.11. Non-Framing of Instruction - Term & Conditions of supply

Stakeholder's Comment:

As per Supply code regulation 2018 UT ED is required to frame conditions of supply and all circulars, orders and any other document or communication relating to supply of electricity to consumers to make them consistent with these Regulation as provided under sec.10.11 of Supply code to avoid unnecessary harassment to the innocent consumers. None of commercial instructions issued by the department is available on its website despite directions on this issue was given on in the Tariff order dated 30.3.21 under Para 2.2.2.

Petitioner's Response:

EWEDC follows the Electricity Supply Code Regulations and their amendments in to-to and all the instructions regarding terms and conditions of supply are available in Supply Code Regulations. The terms and condition of supply and other commercial instruction are already uploaded on the new website.

Commission's View:

The Commission has noted the concerns of the Stakeholders and directs the Petitioner to check the circulars/Orders issued by the Petitioner which are not in accordance with Supply Code Regulations, 2018 as amended from time to time. **Further, the Petitioner is directed to make all the terms and conditions of supply and other commercial instructions available on its website at the earliest.**

2.2.12. Non replacement of electro-mechanical meter & Non-Functional Meters

Stakeholder's Comment:

The Commission has already given directive to the UT ED in the previous many tariff orders to replace the meters in a time-bound-period and the action plan declared. As per press news dated 8.5.22, UT ED has replaced all such meters in the area falling under OP subdivision No.5 only.

UT ED has started to send notices to consumers whose meters are non-functional to purchase their own meter of some approved make & to submit the concerned sub-division so that the non-functional meters may be replaced at the earliest. There is no provision under the act to ask consumers where meters belonging to the licensee became defective & charging meter rentals. It is a duty of the distributing licensee to have sufficient quantity of meters in their stock. Meters are not available at present with the department as no such purchase is made due to privatization of the UT ED. Thus, the department is suffering revenue loss in view of the provision under Supply code under Para 7.12 that licensee can recover the amount for 3 months only in case meter remained defective more than three month.

Further, the Central Government has notified Electricity Consumers Rights-2020 where under sec.6.9 that licensee shall not generate more than two provisional bills for a consumer during one financial year and if provisional billing continues more than two billing cycle (of one month) except under extraordinary situation due to force majeure, the consumer may refuse to pay the dues until bill is raised by the distribution licensee as per actual meter reading. In Chandigarh, such rule is not being followed & average based billing issued continues even for many years. In many such cases licensee has suffered losses as per such cases decided by the CGRF &

Ombudsman as per provision in the supply code. No lesson has been learnt by the licensee to purchase sufficient meters.

Petitioner's Response:

All the Electro-Mechanical Meters have already been replaced and no Electro-Mechanical Meter is existing under EWEDC. Further, faulty meters are being replaced in accordance with supply code 2018 and as per JERC (Standard of Performance for Distribution Licensees) Regulations, 2015.

Commission's View:

The Stakeholder may note the reply of the Petitioner and **the Petitioner is directed to ensure the replacement the non-functional/defective meters within the timelines stipulated in Supply Code Regulations, 2018 and SoP Regulations as amended from time to time.**

2.2.13. Delay in completion of 66 kV works

Stakeholder's Comment:

66 kV Sub Stations in village Raipur Kalan and Village Sarangpur were constructed & completed by UT ED about 10 years ago with the fund approved by the Commission but sub-stations are not in use because the 66 kV line to feed substations are yet to be laid. The warranty clause for machinery given by the manufacturer worth about 15-20 crores might have already been expired due to the lapses on the part of Engineers of the department of the SMART CITY for poor planning.

Petitioner's Response:

Sarangpur: 66 kV Grid Sub-station along with its feeding 66 KV Line has been energized.

Raipur Kalan: Appropriate 39% work has been completed and the matter is sub-judice in the Punjab and Haryana Court and due to stay orders of the Court the work is held up and next date of hearing is 22.07.2022. Further, an Miscellaneous application is filed for an early disposal.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Petitioner is directed to expedite the matter so that the work can be completed as early as possible.

2.2.14. Replacement of old cable

Stakeholder's Comment:

UT ED should replace all underground L.T cable having many joints where open joints covered with Dolki as per UT ED own style (small pillar box) installed. Providing such open joint duly covered with such JUGAD (method) does not exist in the Electricity Act governing to safety of electricity lines / public both. Such joints are dangerous to public. It is requested to ask that licensee to submit sub-division-wise / feeder-wise such joints existing under the jurisdiction of licensee & further directions may be given for replacement of such cables / joints.

Petitioner's Response:

All the safety measures are taken into consideration while repairing of underground LT Cable with joints.

Commission's View:

The Commission has noted the concerns of the Stakeholder. The Stakeholder may note the reply of the Petitioner and **the Petitioner is directed to ensure all safety measures as per CEA regulations.**

2.2.15. Sale of Scrap

Stakeholder's Comment:

UT ED should Quarterly dispose of all its scrap, so as to increase source of Other Income. There are many old vehicles/ DG Sets as old as more than 50 year are lying in their offices/store as a scrap. The parts of these vehicles are also being stolen by the miscreants on many such vehicle & only Chasis are left but no care taken by the senior competent officers to dispose such material/ vehicles lying un-attended. The department does not know the number of such vehicles lying squatted in the open in the yards.

Petitioner's Response:

The case for disposal of old vehicles/materials has been initiated at e-auction portal developed by NIC.

Commission's View:

The Commission has noted the concerns of the Stakeholder. The Stakeholder may note the reply of the Petitioner and **the Petitioner should ensure proper disposal of scraps.**

2.2.16. Abandoned Diesel Powerhouse of UTED located in Timber Market Sector 26, Chandigarh

Stakeholder's Comment:

Diesel Powerhouse was constructed probably in the year 1952-53 by PEPSU GOVT which was taken over by UT administration from PSEB at the time of bifurcation of Punjab Electricity Board on 2nd May 1967. It remained in service & provided supply in emergency to PGI & Pb Haryana Secretariat as long as the original staff of PSEB remained and was transferred to UT thereafter. It has stopped working about 30-35 years back as all such trained workers taken over by UT from PSEB retired. So now this powerhouse is lying abandoned. The imported machinery of this Power House can be sold & good amount can be earned on sale of this abandoned power house as well as spares parts lying in the stores of this power house.

Petitioner's Response:

The case for disposal of old vehicles/materials has been initiated at e-auction portal developed by NIC.

Commission's View:

The Commission has noted the concerns of the Stakeholder. The Stakeholder may note the reply of the Petitioner and **the Petitioner should ensure proper disposal of scraps.**

2.2.17. Availability of material at departmental store

Stakeholder's Comment:

UT ED should make sure that sufficient material like meters, cables, poles & other fittings, etc are available with its store to perform necessary R&M of its network & timely release of new connection and other co related services.

Petitioner's Response:

EWEDC has recently procured 54 Nos. 315 kVA transformers through open market and further procurement cases in respect of 11 KV/ LT Cables and ACSR conductor etc. has been got approved from competent authority and the same shall be procured very shortly through GeM.

Commission's View:

The Commission has noted the concerns of the Stakeholder. The Stakeholder may note the reply of the Petitioner.

2.2.18. General Problem of the residents near Lal-Dora

Stakeholder's Comment:

UT ED has given a large number of connections to contractors/ individuals on Bulk Supply category for sale/ giving connections to their needy residents in the slum/ outside Lal Dora in the area where no developments made by the department for the release of independent connections. The release of such bulk type of connection is not provided in the Supply Code-2018 & thus UT ED has violated the Supply Code as well as Sec 126 of the Electricity Act. It is a duty of the distributing licensee to develop the area of such locality. These contractors/ individuals are selling supply on much higher rates than approved by the Commission for each category of consumers in their tariff order. In many such localities, the licensee is refusing independent connections for such residents having proper proof of documents provided by JERC in the Supply Code. For instance, Shastri Nagar is existing in the area of SDO Mani Majra where more than 800 residents are residing & many such residents have proper documents to apply new connections as per supply code but failed to get the connection. The applications are not entertained by the said office due to the reason that Estimates for development for providing LT lines not approved by the higher authorities. As such, the residents are suffering badly in this area and are compelled to get connection through private contractor to whom connection on Bulk Supply stands given. These contractors do not have documents based on which wrong connections on Bulk Supply are given to them for reasons best known to the licensee. Hence, it is suggested that estimates prepared by the licensee should be sanctioned for early completion of development. No care has been taken by the licensee to approach the commission for extension of timeline for development of this particular area as required under Supply code/ Electricity Act.

Petitioner's Response:

Individual domestic connection outside the Lal-Dora is allowed. However, in respect of NRS connection outside Lal-Dora, the policy has been framed vide which connection can be released after obtaining NOC from the competent authority i.e. Land Accusation Officer (LAO)/ Area SDMs performing duties of DC's/ MC corporation as per area lying in their jurisdiction. Instructions have also been imparted to field officers to convert the existing connection as per existing rules/regulations.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.19. Subsidy for consumers with solar roof-top

Stakeholder's Comment:

The solar roof-top subsidy is not being passed on to the consumers.

Petitioner's Response:

It is intimated that the M/s CREST is the Nodal Agency for implementation of Solar Roof-top PV Plants in UT Chandigarh and has submitted as under:

Phase – 1 Programme of MNRE (GOI)

The subsidy/CFA for 470 Nos. of cases is yet to be released by MNRE (GOI). The letters were sent to MNRE (GOI) on dated 21.10.2019, 23.12.2019, 06.03.2020, 30.04.2020, 22.12.2020, 18.02.2022. The emails were sent to MNRE on dated 28.06.2021, 25.08.2021, 19.09.2021, 19.02.2022, 07.06.2022, but the funds are yet to be released by the MNRE (GOI).

Phase – II Programme of MNRE (GOI)

The letters were sent to MNRE (GOI) for releasing the pending funds under Phase -2 Programme of MNRE (GOI) of amounting to Rs.1,32,04,233/- vide dated 30.11.2021 & email dated 02.12.2021, 21.02.2022 and 12.05.2022 by CREST and the letter was sent by SE Electy to MNRE (GOI) on dated 06.12.2021 & 27.01.2022, but the funds are yet to be released by the MNRE (GOI)

Commission's View:

The Stakeholder may note the reply of the Petitioner. Further, the Commission directs the Petitioner to expedite the process.

2.2.20. Customer care and Department website

Stakeholder's Comment:

The customer care for the consumers of EWEDC and the department's website are not operational.

Petitioner's Response:

It is submitted that Citizen Facilitation Centre (CFC) with the Contact No. 0172-4639999 is already functional in UT Chandigarh round the clock for registering any complaint related to electricity for the consumers of UT Chandigarh. The aforesaid number is also printed on the electricity bills. Further with regards to department website, it is intimated that the website of Chandigarh Administration www.chdengineering.gov.in is already operational, where all the departments/wings of Engineering Department including Electricity Wing have separate link/window.

Commission's View:

The Commission has noted the concerns of the Stakeholder. The Stakeholder may note the reply of the Petitioner.

2.2.21. Hiring of Contractual employees

Stakeholder's Comment:

The EWEDC has not been paying EPF to their own employees and is hiring contractual employees on annual basis.

Petitioner's Response:

The regular employees of EWEDC are covered under GPF and NPS which is being transferred to their account regularly. However, the outsourced employees have been covered under EPF which is being transferred to their account by the respective service provider through concerned Executive engineer.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.22. Installation of Smart meters

Stakeholder's Comment:

The progress on installation of Smart meters sanctioned by various agencies is requested.

Petitioner's Response:

In Smart Grid project under NSGM in Subdivision 5 for replacement of existing meters with smart meters, so far 24149 meters have been replaced with Smart Meters. Further, allotment of work for PAN city is under approval with GoI.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Commission has taken a serious view of the fact that the Petitioner is yet to ensure full compliance and has discussed the same in the chapter on directives. The Petitioner is directed to expedite the Smart Grid Project and submit the progress report within one month of issuance of this order.

2.2.23. Prices charged for Single-Phase Meters

Stakeholder's Comment:

The EWEDC was to submit the detailed report of prices charged for Single Phase Meters by different manufacturers. Latest position is requested.

Petitioner's Response:

The rate of single-phase meter procured in 2020 by department through open market of Maxwell is Rs.292/- and specifications approved makes of manufactured of single-phase meters are already available on website of department as per purchase instruction No.25 and rates of these meters in open market are charged by manufacturers.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.24. Monthly billing for all consumers except Agriculture

Stakeholder's Comment:

Latest decision/ position is requested. Consumers should be clearly apprised that monthly billing will commence only after installation of Smart Meters.

Petitioner's Response:

Monthly billing is already in use in Industrial Category i.e. SP/MS and HT and at present, more than 85% consumers (Domestic & Commercial) are billed Bi-Monthly. The conversion of meter reading from Bi-Monthly to Monthly basis will lead to various problems as there is acute shortage of staff. Further, the software is also required to be amended for Monthly billing. After installation of smart meters for PAN city under NSGM will help for Monthly billing of all category of consumers including Domestic and Commercial category.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Commission has been giving relevant directives in previous as well as current order.

2.2.25. Pre-paid Electric Meters and Smart Meters

Stakeholder's Comment:

Latest position is requested.

Petitioner's Response:

The pilot project under NSGM for replacement of existing meters with smart meters has been completed and approximately 24149 smart meters have already been installed having pre-paid feature & which can be enabled as per billing software for prepaid tariff.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Commission has been giving relevant directives in previous as well as current order to expedite the replacement of existing meters with smart meters.

2.2.26. Commissioning of 220 kV/66 kV substation at Hallo Majra

Stakeholder's Comment:

Update regarding ongoing and new litigation/ court case is requested.

Petitioner's Response:

The commissioning 220/66 kV GIS is under the purview of M/s PGCIL. Recently, PGCIL has intimated that 220 kV Transmission line from Barwala (Panchkula) to Chandigarh which will feed 220 kV GIS Hallomajra, is facing severe ROW issues for which matter has been taken up with Govt. of Punjab and Govt. of India, but resolution is yet to be reached.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Petitioner may take necessary actions to expedite the work.

2.2.27. Creation of a separate Police Station for investigating electrical thefts in Chandigarh

Stakeholder's Comment:

The progress status is requested.

Petitioner's Response:

The enforcement work is fully operational with following manpower:

AEE - 01 No.
JE - 01 No.
LM - 01 No.

Further, a vehicle with driver is also provided to the Enforcement Wing. The defaulting consumers are booked under various provisions of Electricity Act. At present the police authorities assist in checking of theft cases by deputing police personnel as and when required by checking party.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.28. Refund of Excess ED charged from Solar consumers

Stakeholder's Comment:

Till date, no action seems to have been taken. ED responsibility does not end with issuing instructions to Field Officers and Billing Agency. M/s NIELIT for obeying the direction of the Commission. Refund with interest is requested.

Petitioner's Response:

The ED from the Solar consumer is already charged and reconciled in account statements. The EWEDC follows Regulations approved by JERC and EWEDC is taking action as per JERC order dated 12.11.2018 on review Petition No. 262/2018 vide which the Commission has directed that ED shall be payable on net energy imported/ net power consumed from the grid.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Petitioner may refund the excess ED charged from Solar consumers as directed by the Commission in earlier orders.

2.2.29. Over charging of Fixed Charges w.e.f. 4th April 2015

Stakeholder's Comment:

As per guidelines issued by SDO's OPS Sub-Divisions, "Subject to minimum load of 1 kW, the fraction of Load below 500 watts shall be rounded up to its nearest lower level of whole numbers and 500 watts and above shall be rounded to nearest higher level of whole number. This is not being followed from April 2015 onwards. The billing agency is directed to refund amount over charged and fix sanctioned load accordingly. Supply code and Tariff Orders are silent on this issue. So, the question of adherence to supply code by field officers is not applicable.

Petitioner's Response:

The EWEDC follows the tariff structure as approved by Commission through its Tariff Orders on yearly basis and as per latest Tariff Order approved for FY 2021-22 the fixed charge is charged at respective rates for each category on load of per kW and no such bifurcation of charging fixed charge at fraction of load is approved by the Commission. However, the issue is noted and may be discussed with the Commission.

Commission's View:

The Commission notes the stakeholder's comment for taking necessary action in this regard.

2.2.30. Replacement of Service Connection cable from pole to the meter in Consumer premises

Stakeholder's Comment:

As per rules, the ED is responsible for replacement of service connection cable up to the meter in case of any fault ED does not have this cable in the stores to replace and thus transfers the load of service on the serviceable requests the consumer to procure phases or the cable under his own arrangements. This is a very serious situation. Other stores are also deficient. Probably the department is postponing procurement waiting privatization to take place.

Petitioner's Response:

The service connection cable from pole to meter in consumer premises is issued by EWEDC as and when required.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.31. Procurement of Materials (Meters, Tools and Safety Equipment)

Stakeholder's Comment:

As per existing procedure, stores are being procured through "GEM" Portal from suppliers with L1 Quote at comparatively cheaper rates. The materials being procured are substandard. This issue needs rethinking to revise the existing procurement policy.

Petitioner's Response:

As per guidelines/ instructions from ministry of commerce and Industry, GoI, the purchase/ procurement of material is to be done through GeM Portal only. However, the materials which are not available at GeM Portal are procured through competitive bidding from open market & 54 Nos. transformers of 315 kVA are procured from open market.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.32. Directive dated 9th January 2013 (kVA Based Tariff)

Stakeholder's Comment:

Provision of various facilities like prepaid meters, kVAh based tariff are being linked with project for installation of smart meters for which only ambiguous time frames are being given probably with the presumption that satisfactory progress/ improvement will take place only after decision on privatization is clear with target date for completion.

Petitioner's Response:

In Smart Grid project under NSGM in Subdivision 5 for replacement of existing meters with smart meters, so far 24149 meters have been replaced with Smart Meters. Further, allotment of work for PAN city is under approval with GoI. Further, the privatization of EWEDC is sub-judice with the Punjab and Haryana Court.

Commission's View:

The Stakeholder may note the reply of the Petitioner. The Commission has been giving relevant directives in previous as well as current order to expedite the replacement of existing meters with smart meters.

2.2.33. Maintenance of Roads/Passage stretch from V-6 Roads (Internal Sector roads) to sub-stations in various sectors of Chandigarh

Stakeholder's Comment:

These stretches of road are not being maintained by MC Chandigarh since it's the responsibility of Chandigarh Administration. No action is being taken by EWEDC for the past so many years to get these roads metaled. My frequent request to various officials has not brought any results. Also, maintenance of the substations needs improvement by way of ensuring 100% serviceability of Fans, Lights and Coolers, etc.

Petitioner's Response:

All the field XENs have been directed to take necessary action for proper maintenance of all the Grid Substations. Further, maintenance of roads/ passages stretch from V-6 Roads does not fall under the scope of Tariff Petition.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.34. Creation of Special Tariff Slab for Defense Forces

Stakeholder's Suggestion:

A case was taken up with Ministry of Power vide GoI MoD vide letter reference in Para (1) above for shifting of tariff slab from bulk HT to Group Housing Society (GHS) or alternatively a separate special slab for defence forces @ Rs. 4.50 per unit on pan India basis, whichever is lower. Ministry of Power has approached the Forum of Regulator (FoR) for granting Group Housing Society (GHS) Slab/Special Slab for Armed Forces. The FoR has decided that appropriate decision has to be taken by respective SERCs.

Consequently, Himachal Pradesh State Electricity Regulatory Commission (HPSERC) vide Para 4 of Press Note for electricity tariff for FY 2022-23 dated 30th March 2022 have already ordered that all Defense Establishments within the State shall be charged at Domestic rates in lieu of Bulk supply rates being charged earlier.

In view of the above, it is requested to consider the matter for special tariff slab at par or lower than the one applicable to domestic consumers for armed forces stations located in all UTs & Goa on priority.

Commission's View:

The Commission has considered the suggestion of the Stakeholder and rationalised the tariff accordingly.

2.2.35. Operational Safety and Insurance

Stakeholder's Comment:

In the recent past, the Commission has also given a directive to the Chandigarh Administration whereby for the safety as well as for the welfare of the staff means and measures have to be devised. The reply filed by the Chandigarh Administration is very funny. The figures reflected are only the figures which the existing employees are contributing towards their group insurances whereas it was being pressurized that the job involving more and more risk be provided with sufficient quantum of the health as well as other insurances so that at belated stage of time, the families of the sufferer may not have to run from pillar to the post.

It is was also suggested to find out the weights and measures for the safety of the staff by undergoing rigorous type of trainings at the hands of institutes in the State of Punjab and Haryana where the employees may get sufficient exposure before placing them on the work profiles. In view of the observations made hereinabove, the U.T. Powermen Union requests to kindly allow the petition and hope for the redressal of the observations made hereinabove and pass the appropriate order to the Chandigarh Administration so that the qualitative services may be rendered and **Standard of Performance/Right to Service** may be achieved.

Petitioner's Response:

The Electricity Wing of Engineering Department, UT, Chandigarh (EWEDC) already following the Workmen's Compensation Act, 1923 framed by Govt. of India and given Compensation as per Compensation Act to the victims of accidents caused being Govt. Department in case of employee dies due to accident.

Ex-Gratia as applicable from time to time is also given to the family of the deceased employee.

In addition to above, Group Insurance scheme is applicable for all the employees as per their entitlement in case of death or retirement.

Trainings:- The matter for training of employees of Electricity Wing of Engineering Department, UT, Chandigarh (EWEDC) during the current Financial Year 2022-23 is being taken up with the PSPOCL Training Institute so that the training schedule may be planned and finalized. The compliance will be submitted accordingly. However, it is pertinent to mention that as per guidelines of MoP, the EWEDC is on verge of the being privatized and thus the final approval regarding budgetary allocation for conducting training of the employees of EWEDC shall be accorded by the competent authority of Chandigarh Administration in view of finalization of Privatization of EWEDC.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

3. Chapter 3: True-up of the FY 2020-21

3.1. Applicable provisions

The True-up of FY 2020-21 is to be carried out as per Regulation 11 of the JERC MYT Regulations, 2018:

"11. Annual Performance Review, Truing-up and tariff determination during the Control Period

11.1 The Generating Company, Transmission Licensee and Distribution Licensee shall be subject to annual performance review and truing up of expenses and revenue during the Control Period in accordance with these Regulations.

11.2 The Generating Company, Transmission Licensee and Distribution Licensee shall file an application for the annual performance review of the current year, truing up of the previous Year or the Year for which the audited accounts are available and determination of tariff for the ensuing Year on or before 30th November of each Year, in formats specified by the Commission from time to time:

Provided that the Generating Company, Transmission Licensee or Distribution Licensee, as the case may be, shall submit to the Commission information in such form as may be specified by the Commission, together with the audited accounts, extracts of books of account and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges.

11.3 The scope of the annual performance review, truing up and tariff determination shall be a comparison of the performance of the Generating Company, Transmission Licensee or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges and shall comprise of the following:

a) True-up: *a comparison of the audited performance of the Applicant for the Financial Year for which the true up is being carried out with the approved forecast for such previous Financial Year, subject to the prudence check;*

.........."

3.2. Approach for the True-up of FY 2020-21

Petitioner's submission:

The Petitioner has submitted the True-Up Petition for FY 2020-21. Further, the Petitioner has submitted that that audit works is in progress for FY 2020-21 by CAG. The accounts for FY 2020-21 are completed and submitted to CAG, the process of auditing is in progress.

Commission's analysis:

The Commission in its previous orders had stressed upon the requirement of the audited accounts to reflect the true picture and bring in accuracy in the estimates made by the Commission. The JERC MYT Regulations, 2018 require the licensee to file the True up along with the audited accounts in the filing.

Since, the Petitioner has only submitted the unaudited accounts and is yet to submit the audited accounts, the Commission has decided that the true-up would be taken up only after submission of the Auditors' Certificate. Accordingly, the Commission has decided not to take up True-up for FY 2020-21 in the current Order. The Commission directs the Petitioner to prepare and submit the audited accounts for FY 2020-21 along with the next tariff Petition by 30th November 2022.

4. Chapter 4: Annual Performance Review for the FY 2021-22

4.1. Applicable Provisions and Background

The MYT Order for each year of the Control Period from FY 2019-20 to FY 2021-22 was issued by the Commission on 20th May 2019 approving the Aggregate Revenue Requirement (ARR) and tariff for the FY 2019-20. The ARR for FY 2021-22 was further revised and the tariff for FY 2021-22 was approved by the Commission in its Tariff Order dated 30th March 2021.

This Chapter covers the Annual Performance Review (APR) for the FY 2021-22 vis-à-vis the cost parameters approved by the Commission in the Tariff Order for FY 2021-22. The Annual Performance Review for the FY 2020-21 is to be carried out in accordance with the Regulation 11 of the MYT Regulations 2018:

"11. Annual Performance Review, Truing-up and tariff determination during the Control Period

11.1 The Generating Company, Transmission Licensee and Distribution Licensee shall be subject to annual performance review and truing up of expenses and revenue during the Control Period in accordance with these Regulations.

11.2 The Generating Company, Transmission Licensee and Distribution Licensee shall file an application for the annual performance review of the current year, truing up of the previous Year or the Year for which the audited accounts are available and determination of tariff for the ensuing Year on or before 30th November of each Year, in formats specified by the Commission from time to time:

Provided that the Generating Company, Transmission Licensee or Distribution Licensee, as the case may be, shall submit to the Commission information in such form as may be specified by the Commission, together with the audited accounts, extracts of books of account and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges.

11.3 The scope of the annual performance review, truing up and tariff determination shall be a comparison of the performance of the Generating Company, Transmission Licensee or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges and shall comprise of the following:

a) True-up: *a comparison of the audited performance of the Applicant for the Financial Year for which the true up is being carried out with the approved forecast for such previous Financial Year, subject to the prudence check;*

b) Annual Performance Review: *a comparison of the revised performance targets of the Applicant for the current Financial Year with the approved forecast in the Tariff Order corresponding to the Control Period for the current Financial Year subject to prudence check;*

………"

4.2. Approach for the Review for the FY 2021-22

Petitioner's submission:

The Petitioner has submitted the APR of FY 2021-22 based on the actual performance during the H1 (April-September 2021) of the year and the revised estimates for H2 (October - March 2022) of the year. The projections for H2 of FY 2021-22 are arrived at by considering the approved values for FY 2021-22 by the Commission vide its Tariff Order dated 30th March, 2021.

Commission's analysis:

The review of the Aggregate Revenue Requirement requires assessment of the quantum of energy sales, energy loss as well as the various cost elements like Power Purchase Cost, O&M expenses, interest on long term loans, interest on working capital loans, depreciation etc. The Annual Performance Review for the FY 2021-22 has been done based on provisional Power Purchase Quantum and Cost of the FY 2021-22, provisional Energy Sales, etc. The Commission for the purpose of estimating the energy demand of the UT sought the information of month-wise historical sales, number of consumers and connected load from FY 2017-18 to FY 2021-22 from the Petitioner in the first Deficiency Note dated 13th April 2022. Various anomalies and gaps were observed in the data provided. The various cost elements constituting the Aggregate Revenue Requirement have been approved based on the information submitted by the Petitioner, the MYT Regulations 2018 on the basis of the norms approved in the MYT Order dated 20th May 2019. Since the Commission could not take up True-up for FY 2020-21 in the current Order due to non-availability of audited accounts, all the approved values of the APR of FY 2020-21 as approved vide Order dated 30th March 2021 has been considered by the Commission for carry forward in the APR of FY 2021-22. Also, the provisional data for FY 2021-22 as submitted by the Petitioner has been considered for the APR.

4.3. Energy Sales

Petitioner's Submission

The sales for the FY 2021-22 have been estimated based on actual sales for the first half (H1) i.e., for April to September 2021 and the second half consumption has been equated to second half actual sales of FY 2019-20. The Petitioner has submitted that FY 2020-21 and FY 2021-22 being the years affected from Covid-19 pandemic, due to lockdown etc, the sales were reduced abnormally. hence, FY 2019-20 actual figures have been relied upon assuming the sales will reach the pre-pandemic levels in the second half of FY 2021-22. Total sales of 1,440.02 MU have been estimated against the 1,667.99 MU as approved by the Commission in the Tariff Order for FY 2021-22.

The Petitioner in replies to 2nd Deficiency Note vide Memo No. SEE/OPIC1/2022/210/951 dated 27th May 2022 has submitted the provisional sales for FY 2021-22 as follows:

Table 9: Energy Sales (MU) submitted by the Petitioner for the FY 2021-22

S. No.	Category	Petitioner's Submission
1	Domestic	770.27
2	Commercial	402.16
3	Large Supply	117.48
4	Medium Supply	98.26
5	Small Supply	16.35
6	Agriculture	1.44
7	Public lighting	14.75
8	Bulk supply	77.17
9	Temp. Supply	3.56
	Gross Total	**1,501.44**

Commission's Analysis

The Commission has noted the provisional information provided by the Petitioner for the FY 2021-22. The Commission is of the view that due to Covid-19 pandemic, the energy sales for FY 2021-22 is significantly lower.

Thus, the Petitioner's method of determining the energy sales for H2 of FY 2021-22 in proportion as the actuals of H2 of FY 2019-20 cannot be considered appropriate. Therefore, for all the categories, the Commission has considered the provisional energy sales for FY 2021-22 as submitted by the Petitioner in reply to the replies to 2nd Deficiency Note vide Memo No. SEE/OPIC1/2022/210/951 dated 27th May 2022.

The following table provides the energy sales approved by the Commission in the Tariff Order, the Petitioner's submission and now approved by the Commission:

Table 10: Energy Sales (MU) approved by the Commission for the FY 2021-22

S. No.	Category	Approved in Tariff Order for FY 2021-22	Petitioner's Submission		Now Approved by Commission
			Apr-Sep (Actual)	Estimated for FY 2021-22	
1	Domestic	815.21	332.42	702.80	770.27
2	Commercial	494.56	205.28	414.26	402.16
3	Large Supply	126.49	48.46	108.81	117.48
4	Medium Supply	106.38	47.60	99.51	98.26
5	Small Supply	18.43	8.03	16.28	16.35
6	Agriculture	1.47	0.57	1.21	1.44
7	Public lighting	15.37	5.69	14.21	14.75
8	Bulk supply	85.88	44.07	78.79	77.17
9	Temp. Supply	4.20	1.77	4.14	3.56
	Gross Total	**1,667.99**	**693.88**	**1,440.02**	**1,501.44**

The Commission approves energy sales of 1,501.44 MU in the APR of the FY 2021-22.

4.4. Inter-State Transmission Loss

Petitioner's submission

The Petitioner has considered the Inter-State Transmission Loss of 4.03%, same as the actual transmission losses of FY 2019-20.

Commission's analysis

The Commission in the APR of FY 2021-22 considers the Inter-State transmission losses in line with those approved in the True-up of FY 2019-20. The same shall be revised based on actuals during the True-up exercise.

The following table provides the Inter-State Transmission Loss approved by the Commission in the Tariff Order for FY 2021-22, the Petitioner's submission and Loss level now approved by the Commission.

Table 11: Inter-State Transmission Loss (%) approved by the Commission for the FY 2021-22

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Inter-State Transmission Losses	4.03%	4.03%	4.03%

The Commission approves Inter-State Transmission Loss of 4.03% for the APR of the FY 2021-22.

4.5. Intra-State Distribution Loss

Petitioner's submission

The Petitioner submitted that as per the Tariff Order dated 20th May, 2019, the T&D loss approved for the FY 2021-22 was 9.20% as against the Petitioner's submission of 12.85%. Further, vide order dated 30th March 2021, the Commission has approved the T&D Loss of 9.20% against the revised loss levels of 11.80% as submitted by the Petitioner. While the Petitioner is dedicated for reducing the intra-state T&D losses in the UT of Chandigarh, there are constraints in reducing the T&D loss.

In addition to the issue of higher LT sales, another important factor is the absence of interconnection point within the UT boundary which has also been submitted to the Commission in its past submissions. The energy input at the Petitioner's periphery is currently being metered at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) which has resulted in higher T&D losses for the Petitioner. The Petitioner has to bear around 3% additional losses of interstate circuit due to not having any interstate point in its boundary. In this regard, the Petitioner has submitted that construction of a 220/66 kV substation at Hallo Majra is under progress by M/s PGCIL. This substation shall cater to the future load growth of Chandigarh resulting in lower losses due to commissioning of an interconnection point within the UT periphery.

The Petitioner has further submitted that as FY 2021-22 also witnessed the lockdown, the sales have been subdued and LT sales being proportionately higher than pre-pandemic levels. Under the above special circumstances, it would be very difficult for drastic loss reduction vis-à-vis actual T&D loss for FY 2020-21. Accordingly, the Petitioner has proposed a T&D loss target of 13.31% for FY 2021-22 considering 0.50% loss reduction over and above actuals of FY 2020-21.

Commission's analysis

The Commission in the MYT Order dated 20th May 2019 had discussed in detail the approach and the basis of setting the Intra-State Distribution Loss trajectory for the MYT Period from FY 2019-20 to FY 2021-22 and retained the same in Tariff Order for FY 2021-22. The Petitioner has not made any additional submissions to substantiate its claim. The Commission decides to retain the same T&D loss as approved earlier.

The following table provides the Intra-State Distribution Loss approved in the Tariff Order for FY 2020-21, the Petitioner's submission and now approved by the Commission.

Table 12: Intra-State Distribution Loss (%) approved by the Commission for the FY 2021-22

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Intra-State Distribution Loss	9.20%	13.31%	9.20%

The Commission approves Intra-State Distribution Loss of 9.20% in the APR of the FY 2021-22.

4.6. Power Purchase Quantum & Cost

Petitioner's submission:

The Petitioner procures power from various sources such as:

- Central Generating Stations (CGS) such as NTPC, NHPC and NPCIL
- Other Generating Stations such as SJVNL, BBMB, THDC, APCPL and MUNPL
- Other Sources such as bilateral agreement, banking arrangement, power exchange, State Solar, UI etc.

For the purpose of review for the FY 2021-22 power purchase quantum, as laid out in the Business Plan, EWEDC has considered the power availability for FY 2021-22 from Central Generating Stations same as that it received during FY 2019-20. Further, EWEDC has considered additional procurement of power from SECI's Wind Power source with minimum annual offtake of 151.48 MU from 40 MW RTC Peak Power from Wind fulfilling energy requirements as well as Non-Solar RPO of the state. The projections from this source have been considered on the basis of provisional CUF of 35.98% as provided by SECI, which in turn works out to an yearly generation of 125.73 MU. Shortfall in power from allocations, if any, based on the estimated sales and losses for FY 2021-22 has been considered to procure from short-term sources i.e. power exchange, UI & other trading sources.

For the purpose of working out the various components of power procurement cost i.e. Fixed Charges, Variable Charges and Other Charges, EWEDC has followed the following approach:

- Considered actual fixed charges paid in Q1 of FY 2021-22 and extrapolated them to arrive at the revised projections for FY 2021-22 for respective Central Generating Stations.
- Considered the actual per unit variable costs of FY 2021-22 Q1 and has calculated the revised projections for year FY 2021-22.
- Considered actual other charges paid in Q1 of FY 2021-22 and extrapolated them to arrive at the revised projections for FY 2021-22.

Further, the Petitioner in replies to 1st Deficiency note has submitted the revised estimated power purchase cost for FY 2021-22 as presented in the following table:

Table 13: Power Purchase quantum (MU) and cost (In INR Cr) submitted by the Petitioner

Sr. No.	Particulars	Approved in T.O. dated 30th March, 2021		Revised Estimate	
		Units (in MUs)	Cost (in Rs. Cr.)	Units (in MUs)	Cost (in Rs. Cr.)
1	NTPC Stations	346.52	151.68	299.50	141.80
2	NHPC Stations	296.32	116.38	302.03	108.71
3	NPCIL	176.40	67.23	191.09	64.46
4	SJVNL	118.06	28.84	131.92	35.61
5	BBMB	648.67	141.68	644.70	163.79
6	THDC	177.90	81.42	186.99	76.51
7	MUNPL	16.49	14.64	61.62	31.91
8	CREST	8.10	6.37	15.78	12.16
9	Pvt. Solar (Gross)	1.18	1.01	1.31	1.16
10	Pvt. Solar (Net)	0.33	0.10	0.90	0.30
11	Aravali Power Company Private Limited	38.75	23.59	27.41	23.29
12	Bilateral/Power Exchange	0.00	0.00		
13	Short-term Purchase/ (Sale)	0.00	0.00	(164.79)	(65.78)
14	UI Purchase/ (Sale)	0.00	0.00	(87.17)	(28.48)
15	Non-Solar (SECI)	83.33	24.17	99.27	27.90
16	PTC	36.60	13.21	0.00	0.00
17	REC (Solar & Non-Solar)	0.00	0.00	0.00	0.00
18	Others (PGCIL, Reactive Power, NRLDC)	0.00	75.67		107.51
	Grand Total	**1837.00**	**715.35**	**1,710.57**	**700.86**

Commission's Analysis:

The Commission while estimating the power purchase quantum and cost for FY 2021-22 has considered the actual quantum and cost of power as submitted by the Petitioner in replies to 1st Deficiency Note. The methodology followed for projecting the quantum and cost for the remaining months of FY 2021-22 has been discussed as follows:

4.6.1. Availability of power

Availability of energy from Central Generating Stations:

- The energy availability from NTPC, NHPC, NPCIL, SJVNL, BBMB, THDC, APCPL, MUNPL are considered as per the actuals submitted by the Petitioner vide replies to 1st Deficiency Note.

Availability of power from CREST and other Renewable Energy Sources

- The energy availability from CREST and other Renewable Energy are considered as per the actuals submitted by the Petitioner vide replies to 1st Deficiency Note.

Availability of power from the Open Market, Unscheduled Interchange and Banking

- The Open market purchase and sale has been considered as per actuals.
- No quantum of energy under banking has been considered for FY 2021-22.
- Quantum under UI Over-drawal/ Under-drawal in FY 2021-22 has been considered as per actuals.

4.6.2. Power Purchase Cost

Variable Charges:

- The variable charges for various power stations have been considered as per actuals submitted by the Petitioner.
- For purchase/sale of power from the Open Market, the actuals submitted by the Petitioner are considered.

Fixed Charges:

- Actual Fixed Costs have been considered for all stations.

Other Charges:

- Other charges have not been considered for FY 2021-22. The same shall be considered as per actuals during the true-up of FY 2021-22.

4.6.3. Transmission Charges

The Transmission Charges have been considered as per actuals submitted by the Petitioner.

4.6.4. Total power purchase quantum and cost

The following table provides the quantum of energy availability and the power purchase cost approved by the Commission for the FY 2021-22:

Table 14: Power Purchase Quantum (MU) and cost (INR Cr) approved by the Commission for the FY 2021-22

Details of the stations	Units Purchased (MU)	Fixed Charges (INR. Cr.)	Variable Charges (INR. Cr.)	Total Charges (INR. Cr.)
NTPC				
Singrauli	12.78	1.42	1.95	3.36
Rihand I	51.15	6.65	7.26	13.91
Rihand II	37.33	4.53	5.31	9.85
Rihand III	37.29	7.45	5.20	12.65
Unchahar I	7.27	1.65	2.40	4.06
Unchahar II	14.11	2.64	4.76	7.39
Unchahar III	6.78	1.29	2.26	3.55
Unchahar IV	20.53	5.59	6.40	11.99
Anta	0.74	5.78	0.18	5.96
Auriya	3.44	6.83	1.42	8.24
Dadri	5.57	7.15	1.81	8.96
Kahalgaon II	23.01	2.28	5.13	7.41
Dadri II	6.21	1.76	2.04	3.81
Koldam Hydro	47.54	13.32	11.65	24.97
Singrauli Hydro	0.34	-	0.17	0.17
Tanda II	25.41	6.32	6.98	13.30
Subtotal - NTPC	**299.50**	**74.65**	**64.93**	**139.58**
NHPC				
Salal	8.83	0.71	0.54	1.26
Tanakpur	5.37	1.10	0.87	1.97
Chamera I	72.89	7.30	8.32	15.62
Chamera II	35.81	3.96	3.60	7.56
Uri	17.72	1.68	1.46	3.13
Dhauliganga	28.05	3.87	3.41	7.28
Dulhasti	43.97	11.44	11.56	22.99
Sewa II	1.32	0.22	0.35	0.57
URI II	27.96	5.22	5.73	10.95
Chamara III	22.47	5.20	4.43	9.62
Parbati-III	13.72	6.26	2.11	8.37
Kishanganga	23.94	4.73	4.71	9.45
Subtotal- NHPC	**302.03**	**51.68**	**47.08**	**98.76**
NPCIL				
NAPS	83.07	-	24.68	24.68
RAPP (Unit 3 & 4)	17.90	-	5.66	5.66
RAPP (Unit 5 & 6)	90.12	-	33.62	33.62
Subtotal- NPCIL	**191.09**	**-**	**63.96**	**63.96**
SJVNL				
Nathpa Jhakri	112.74	13.83	12.94	26.78
Rampur	19.19	4.68	4.10	8.78
Subtotal- SJVNL	**131.92**	**18.52**	**17.04**	**35.56**
BBMB				
BBMB 3.5%	545.09	-	-	-

Details of the stations	Units Purchased (MU)	Fixed Charges (INR. Cr.)	Variable Charges (INR. Cr.)	Total Charges (INR. Cr.)
BBMB 1 LU- Dehar	84.37	-	14.05	14.05
BBMB 10 LU- Pong	15.24	-	140.53	140.53
Subtotal- BBMB	**644.70**	**-**	**154.58**	**154.58**
APCPL				
APCPL Jhajjar	27.41	12.89	9.62	22.51
Subtotal- APCPL	**27.41**	**12.89**	**9.62**	**22.51**
THDC				
Koteshwar	15.60	3.57	3.59	7.16
Tehri	171.39	33.45	34.22	67.67
Subtotal- THDC	**186.99**	**37.02**	**37.82**	**74.83**
MUNPL				
Meja Thermal	61.62	16.80	14.93	31.73
Subtotal- MUNPL	61.62	16.80	14.93	31.73
RPO				
SECI Wind (Tranche-VI)	99.27	-	28.32	28.32
CREST	15.78	-	12.16	12.16
Pvt. Solar (Gross)	1.31	-	1.19	1.19
Pvt. solar (Net)	0.90	-	0.30	0.30
Subtotal- Others	**117.26**	**-**	**41.97**	**41.97**
Total – Firm Sources	**1,962.52**	**211.55**	**451.93**	**663.48**
UI Purchase	51.84	-	-	20.99
UI Sale	(139.01)	-	-	(49.47)
Open Market Purchase	18.08	-	-	10.37
Open Market Sale	(182.87)	-	-	(76.15)
Sub Total- Power Purchase Cost	**1,710.57**	**211.55**	**451.93**	**569.22**
Other Charges				
PGCIL Charges				102.65
NRLDC				0.29
UI NRPC Fund				0.10
Reactive Energy Charges				0.01
UPPPTCL Transmission Charges				0.67
Total Power Purchase Cost	**1,710.57**	**211.55**	**451.93**	**672.94**
Surplus power sold at APPC	**57.00**			**22.42**
Total Power Purchase Cost	**1,653.57**			**650.52**

The Commission approves the revised quantum of power purchase as 1,710.57 MU at the UT Periphery with total cost of INR 672.94 Cr in the APR of the FY 2021-22.

Further, the Commission approves certain quantum based on T&D losses of 9.20% for FY 2021-22 as given in the Energy Balance section which is sold at the APPC of INR 3.93/kWh. Accordingly,

the net power purchase cost approved by the Commission is INR 650.52 Cr in the APR of the FY 2021-22.

4.7. Renewable Purchase Obligation (RPO)

Petitioner's submission:

The Petitioner is required to procure power from renewable sources for meeting the RPO requirement for the FY 2021-22. The Commission had notified amendment to the JERC (Procurement of Renewable Energy) Regulations, 2010 on 22nd August, 2016. As per the amendment issued, the Petitioner has to purchase 17.00% of total energy purchase from renewable sources for the FY 2021-22 including 8.00% for Solar and 9.00% for Non-Solar.

EWEDC envisages that the present sources of power shall be enough to meet the RPO obligations. Further, based on the revised sales for FY 2021-22, applicable RPO and the RPO compliance during FY 2021-22 have been computed. Besides the purchase from solar plants under gross metering and net metering, EWEDC has also purchased the energy from Non-Solar sources which include SECI's Wind Power. In this regard, EWEDC submits that the total RPO obligation for FY 2021-22 stands at 69.30 MU (including Solar & Non-Solar). EWEDC further submits that the cumulative Backlog of Non-Solar RPO obligation of 18.92 MU of FY 2020-21 has been carried over and considered in FY 2021-22 in the total Non-Solar RPO Obligation of 45.59 MU. EWEDC's Solar RPO obligation for FY 2021-22 is 23.71 MU. Further, EWEDC has further submitted that by the Closing of FY 2021-22, they would be able to procure sufficient solar power from Gross Metering and Net Metering sources similar to FY 2020-21 levels and the entire Solar RPO obligation of FY 2021-22 would be fulfilled during the respective year itself. In view of the same, no RPO compliance backlog for FY 2021-22 has been projected and any additional cost towards fulfilling the RPO obligation has not been booked during FY 2021-22.

The RPO requirement for FY 2021-22 and the compliance status as submitted by the Petitioner has been provided in the following table:

Table 15: Effective Energy Sales (Excluding Hydro) as submitted by Petitioner

S. No.	Particular	Formula	FY 2021-22
1	Energy Sales within UT (In MUs)	a	1440.02
2	Hydro Power Purchase (In MUs)	b	1374.74
3	Inter-State Loss	c	4.03%
4	Inter-State Loss (In MUs)	d=b*c	55.40
5	Intra-State Loss	e	13.31%
6	Intra-State Loss (In MUs)	f=e*(b-d)	175.64
7	Hydro Power Consumed (In MUs)	g=b-d-f	1143.70
8	**Conventional Power Consumed (In MUs)**	**h=a-g**	**296.32**

Table 16: RPO Requirement (Solar and Non-Solar) as submitted by Petitioner

Particulars	RPO (%)	Target		Estimated 2020-21	Total RPO Obligation for the FY 2021-22 (in MU)	RPO Target Met during FY 2021-22 Units (in MU)
		Conventional Power Consumed (MU)	Units (MU)	Units (MU)		
Solar	8.00%	296.32	23.71	-	23.71	7.68
Non-Solar	9.00%	296.32	26.67	18.92	45.59	120.66
Total	**17.00%**		**50.38**	**18.92**	**69.30**	**128.34**

Commission's analysis:

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

"Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year."

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and approved the revised RPO targets, as per which the Petitioner has to purchase 17.00% of its total consumption through conventional sources (including 8.00% from Solar) from renewable sources for the FY 2021-22.

The effective energy sales used for calculation of the RPO has been arrived at as follows:

Table 17: Effective energy sales (adjusted for hydro) (in MU)

S.No.	Particular	Formula	FY 2021-22
1	Energy Sales within UT	a	1,501.44
2	Hydro Power Purchase	b	1,401.82
3	Inter-State Loss (%)	c	4.03%
4	Inter-State Loss (MU)	d= c*b	56.49
5	Intra-State Loss (%)	e	9.20%
6	Intra-State Loss (MU)	f=e*(b-d)	123.77
7	Hydro Power Consumed (MU)	g=b-d-f	1221.56
8	Conventional Power consumed	h= a-g	**279.88**

In accordance with the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010 and the Petitioner's submission, the Commission has determined the following Renewable Purchase Obligation for the Petitioner for the FY 2021-22. The cumulative backlog of solar and non-solar compliance up to FY 2020-21 has been considered as per the Commission's Order on the Suo Moto Petition No. 61/2012 dated 5th July 2021.

Table 18: Summary of Renewable Purchase Obligation (RPO) (MU)

Description	FY 2021-22
Sales within State from conventional sources (MU)	279.88
RPO obligation (in %)	**17.00%**
Solar	8.00%
Non-solar	9.00%
RPO obligation for the year (in MU)	**47.58**
Solar	22.39
Non-solar	25.19
Backlog upto FY 2020-21	**0.00**
Solar	0.00
Non Solar	0.00*
Total RPO to be fulfilled for the year	**47.58**
Solar	22.39
Non Solar	25.19
RPO compliance (proposed actual purchase)	**117.26**
- Solar	**17.99**
CREST power	15.78

Description	FY 2021-22
Pvt. Solar (Gross Generated)	1.31
Net Solar	0.90
-Non-solar	99.27
RPO compliance (REC certificate purchase)	**0.00**
- Solar	0.00
-Non-solar	0.00
Total RPO compliance (Physical Purchase+ REC certificate purchase)	**117.26**
- Solar	17.99
-Non-solar	99.27
**The Commission has not considered the backlog for Non-Solar as stated by the Petitioner since the True-Up for FY 2020-21 was not taken up.*	

As per the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 dated 22nd August 2016, the Commission has notified the total RPO in terms of percentage of total energy mix of consumption excluding hydropower and has also specified the minimum quantum of Solar RPO to be met out of the total RPO. The Commission has observed that the Licensee has projected under-achievement of Solar RPO. The actual compliance in respect of the pending RPO would be reviewed at the time of true-up along with the submission of supporting details such as purchase of RECs, bills from Solar/Non-Solar plants for the year.

The compliance and cost status towards RPO for FY 2021-22 as approved by the Commission is provided in the following table:

Table 19: Cost towards compliance of Renewable Purchase Obligation (In INR Cr)

S. No	Description	RPO (MU)	Total Cost (INR Cr)	Avg. Rate (INR/kWh)
1	**Solar**	**17.99**	**13.65**	**7.59**
(a)	*CREST**	15.78	12.16	7.71
(b)	*Pvt. Solar (Gross/Net Generation)**	2.21	1.49	6.74
2	**Non-solar**	**99.27**	**28.32**	**2.85**
	Total	**117.26**	**41.97**	**3.58**

**Includes the Captive Generation*

The Commission approves INR 41.97 Cr towards compliance of RPO in the APR of FY 2021-22 and the same has been considered in the Power Purchase cost approved for FY 2021-22.

4.8. Energy Balance

Petitioner's submission

The energy requirement as submitted by the Petitioner has been shown in the following table:

Table 20: Energy Requirement of the System (MU)

Energy Available	Petitioner's Submission
Units Procured	2,123.17
Less: Outside Sale - Trading	407.93

Energy Available	Petitioner's Submission
Energy Available	1,715.24
Inter-State Transmission Loss	4.03%
Transmission Loss (Mus)	69.43
Net Energy Available at UT Periphery	**1653.48**
Power procured from Gross & NET Metering Mode (In MUs)	7.68
Total Energy Available	**1,661.17**
Actual Energy Sales (Mus)	1,440.02
T&D Loss (%)	13.31%
T&D Loss (in MUs)	221.15
Total Energy Required at UT Periphery (MUs)	**1,661.17**
Demand Supply (Gap) / Surplus	**0.00**

Commission's analysis

Based on the revised estimates of energy sales and power purchase quantum, the Commission approves the following energy balance:

Table 21: Energy Balance approved by the Commission for the FY 2021-22 (MU)

Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
Energy Requirement			
Energy sales within the State/UT (a)	1,667.99	1,440.02	1501.44
Distribution losses (b)			
%	9.20%	13.31%	9.20%
MU	169.00	221.15	152.13
Total Energy requirement (c=a/(1-b))	**1,837.00**	**1,661.17**	**1653.57**
Energy Availability			
Availability from various sources (d)	1948.67	1,661.17	1,962.52
Availability from UI Over-drawal/ Under-drawal (e)	0.00	0.00	(87.17)
Add: Net sale/ Purchase in Open Market in FY 2021-22 (f)	0.00	0.00	(164.79)
Total Energy Availability (h=d+e+f)	**1948.67**	**1,661.17**	**1,710.57**
Deficit/(Surplus) (i=c-h)	**(111.67)**	**0.00**	**(57.00)**

The Commission has estimated a surplus of 57.00 MU. The revenue from sale of surplus power has been adjusted by the Commission in power procurement cost approved in the earlier section. Further, the Commission has approved higher energy procurement due to high T&D losses and the same is not considered while calculating the APPC.

4.9. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative & General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 51 of the MYT Regulation, 2018 states the following:

51.1 The Operation and Maintenance expenses for the Distribution Wires Business shall be computed in accordance with this Regulation.

51.2 Operation and Maintenance (O&M) expenses shall comprise of the following:

a) Employee expenses - salaries, wages, pension contribution and other employee costs;

b) Administrative and General expenses including insurance charges if any; and

c) Repairs and Maintenance expenses.

51.3 The Distribution Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the transmission Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

51.4 O&M expenses for the nth Year of the Control Period shall be approved based on the formula given below:

O&Mn = (R&Mn + EMPn + A&Gn) x (1 - Xn) + Terminal Liabilities

Where,

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

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

A&Gn = (A&Gn-1) x (CPIinflation)

'K' is a constant (expressed in %). Value of K for each Year of the Control Period shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPIinflation – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3) Years before the base Year;

WPIinflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three (3) Years before the base Year;

EMPn – Employee expenses of the Distribution Licensee for the nth Year;

A&Gn – Administrative and General expenses of the Distribution Licensee for the nth Year;

R&Mn – Repair and Maintenance expenses of the Distribution Licensee for the nth Year;

GFAn-1 – Gross Fixed Asset of the transmission Licensee for the n-1th Year;

Xn is an efficiency factor for nth Year. Value of Xn shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;

Gn is a growth factor for the nth Year. Value of Gn shall be determined by the Commission for each Year in the Multi Year Tariff Order for meeting the additional manpower requirement based on Licensee's filings, benchmarking, approved cost by the Commission in past and any other factor that the Commission feels appropriate:

Provided that in case the Distribution Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, O&M Expenses shall be determined on case to case basis.

51.5 Terminal liabilities of employees of Licensee including pension expenses etc. shall be approved as per actuals submitted by the Licensee, subject to prudence check or be established through actuarial studies. Additionally, any variation due to changes recommended by the pay commission shall be allowed separately by the Commission, subject to prudence check.

51.6 For the purpose of estimation, the same value of factors – CPIinflation and WPIinflation shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors – CPIinflation and WPIinflation during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation.

4.9.1. Employee Expenses

Petitioner's submission

The Petitioner has claimed the Employee Expenses, A&G Expenses and R&M Expenses for the FY 2021-22 based on the O&M expenses approved by the Commission vide order dated 30th March 2021.

Commission's analysis

In accordance with the MYT Regulations, 2018, the Commission has determined the Employee expenses for each year of the MYT Control Period. The Regulation 6 of the MYT Regulations, 2018 stipulates the following:

*"**6. Values for Base Year***

6.1 The values for the Base Year of the Control Period shall be determined on the basis of the audited accounts or provisional accounts of last three (3) Years, and other factors considered relevant by the Commission:

Provided that, in absence of availability of audited accounts or provisional accounts of last three (3) Years, the Commission may benchmark the parameters with other similar utilities to establish the values for Base Year:

Provided further that the Commission may change the values for Base Year and consequently the trajectory of parameters for Control Period, considering the actual figures from audited accounts.

In accordance with MYT Regulations, the Employee expenses shall be revised to the extent of change in inflation and growth rate during the control period. Accordingly, the Commission has considered the approved value of employee expenses for FY 2018-19 for computation of revised employee expenses of FY 2021-22. The Commission has considered the employee growth rate for FY 2019-20, FY 2020-21 and FY 2021-22 as submitted by the Petitioner along with the average CPI of previous three years to arrive at the employee expenses for FY 2021-22.

The CPI Inflation has been computed as follows:

Table 22: Computation of CPI Inflation (%)

<table>
<tr><th>FY</th><th>Increase in CPI Index</th><th>Average increase in CPI indices over 3 years</th><th>Average increase in CPI indices over 3 years</th><th>Average increase in CPI indices over 3 years</th></tr>
<tr><td>2016-17</td><td>4.12%</td><td rowspan="3">4.22%</td><td></td><td></td></tr>
<tr><td>2017-18</td><td>3.08%</td><td rowspan="3">5.35%</td><td></td></tr>
<tr><td>2018-19</td><td>5.45%</td><td rowspan="3">6.00%</td></tr>
<tr><td>2019-20</td><td>7.53%</td><td></td></tr>
<tr><td>2020-21</td><td>5.02%</td><td></td><td></td></tr>
</table>

Table 23: Employee recruitment plan as submitted by the Petitioner

S. No	Particulars	FY 2018-19 Base Year	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Employee	1,106	1,048	977	1,071

S. No	Particulars	FY 2018-19 Base Year	FY 2019-20	FY 2020-21	FY 2021-22
2	Recruitment	21	5	184	108
3	Retirement	79	76	90	93
4	Closing Employee	1,048	977	1,071	1,086
5	Growth rate	-5.24%	-6.77%	9.62%	1.40%

Accordingly, the employee expenses approved by the Commission for FY 2020-21 have been provided in the following table:

Table 24: Employee Expenses approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	EMPn-1 (INR Crore)	70.55	68.54	79.16
2	Growth in number of employees (Gn)	-6.77%	9.62%	1.40%
3	CPI Inflation for preceding three years (%)	4.22%	5.35%	6.00%
4	**Employee Expenses**	**68.54**	**79.16**	**85.09**

The Commission approves Employee Expenses of INR 85.09 Cr for FY 2021-22.

4.9.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has claimed the A&G Expenses for the FY 2021-22 based on the O&M expenses approved by the Commission vide order dated 30th March 2021.

Commission's analysis

Similar to the methodology followed while estimating the employee expenses, the Commission has determined the A&G expenses for the FY 2021-22 using the CPI Inflation for preceding three years.

The A&G expenses approved by the Commission in FY 2021-22 have been provided in the following table:

Table 25: A&G Expenses approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	A&G Expenses(n-1)	4.59	4.78	5.04
2	CPI Inflation	4.22%	5.35%	6.00%
3	**A&G Expenses**	**4.78**	**5.04**	**5.34**

The Commission approves the Administrative & General (A&G) expenses of INR 5.34 Cr for FY 2021-22.

4.9.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has claimed the R&M Expenses for the FY 2021-22 based on the O&M expenses approved by the Commission vide order dated 30th March 2021.

Commission's analysis

In accordance with the MYT Regulations, 2018, the 'K' factor has been considered same as approved in the MYT Order. The 'K' factor is then multiplied with the opening GFA approved for (n-1)th year. The resultant amount is then escalated by latest WPI Inflation to arrive upon the R&M Expenses for FY 2021-22.

The WPI Inflation has been computed as follows:

Table 26: Computation of WPI Inflation (%)

FY	Average of (Apr-Mar)	Increase in WPI Index	Average increase in WPI indices over 3 years
2018-19	119.79	4.28%	
2019-20	121.80	1.68%	
2020-21	123.38	1.29%	
		WPI Inflation	**2.42%**

The R&M expenses approved by the Commission in FY 2021-22 have been provided in the following table:

Table 27: R&M Expenses approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	FY 2021-22
1	GFA (GFA_{n-1}) of previous year	462.92
2	K factor approved (K) in MYT Order	2.32%
3	WPI Inflation (Average of preceding three years)	2.42%
4	**R&M Expenses = (K x (GFA_{n-1}) x ($1+WPI_{inflation}$)**	**11.00**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 11.00 Cr for FY 2021-22.

4.9.4. Total Operation and Maintenance Expenses (O&M)

The following table provides the O&M expenses, approved by the Commission in the Tariff Order for FY 2021-22, Petitioner's submission and O&M expenses now approved by the Commission.

Table 28: O&M Expenses approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	80.48	80.48	85.09
2	Administrative & General Expenses (A&G)	7.69	7.69	5.34
3	Repair & Maintenance Expenses	11.06	11.06	11.00
	Total Operation & Maintenance Expenses	**99.22**	**99.23**	**101.43**

The Commission approves the Operation & Maintenance (O&M) expenses of INR 101.43 Cr in the APR of the FY 2021-22.

4.10. Capital Expenditure and Capitalisation

Petitioner's submission

The Petitioner has submitted that due to interrupted lockdowns both in FY 2020-21 and FY 2021-22 and ongoing privatization proceedings not much of Capital Expenditure could be executed in FY 2021-22.

The following table provides the capital expenditure and capitalisation proposed during FY 2021-22 by the Petitioner.

Table 29: Capitalisation for FY 2021-22 as submitted by the Petitioner (In INR Cr)

Sr. No.	Particulars	FY 2021-22
1	Capital Expenditure	11.96
2	Capitalisation	8.60

Commission's analysis

The Commission with regard to the capital expenditure and capitalisation proposed to be undertaken during the year directed the Petitioner to submit the details of the schemes to be undertaken during the year along with the supporting documents. Against the capital expenditure approved of INR 93.30 Cr approved for FY 2021-22, the Petitioner has only undertaken capital expenditure of INR 11.96 Cr in FY 2021-22. Furthermore, against a capitalisation of INR 57.38 Cr approved in the Tariff Order, capitalisation of only INR 8.60 Cr has been achieved in FY 2021-22. The Commission takes a serious note of the inability of the Petitioner to meet the approved capital expenditure targets. In the current year, the Petitioner has managed to achieve much lower capitalisation than approved. The Commission cautions the Petitioner that such slow pace of implementation will have a substantial bearing on its revenue, will be detrimental to its own financial health and at the same time will have an impact on the quality of power supplied to the consumers. **Hence, the Commission directs the Petitioner to expedite its efforts towards achieving capitalisation and submit quarterly status report to the Commission**.

Post thorough scrutiny and review of the supporting documents submitted by the Petitioner with regards to the capital expenditure and capitalization of schemes undertaken, the Commission approves the capital expenditure and capitalisation for the year as shown in the following table:

Table 30: Capitalisation approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Capital Expenditure	93.30	11.96	11.96
2	Capitalisation	57.38	8.60	8.60

The Commission approves capital expenditure of INR 11.96 Cr and capitalisation of INR 8.60 Cr in the APR of the FY 2021-22.

4.11. Capital Structure

Petitioner's Submission

The Petitioner has proposed that the entire capitalisation for FY 2021-22 shall be through deployment of capital equity.

Commission's analysis

The Regulation 26 of the MYT Regulations, 2018 specifies the following

"26. Debt to Equity Ratio

26.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2018 shall be considered:

Provided that in case of retirement or replacement or De-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or De-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

26.2 For New Projects, the debt-equity ratio as on the Date of Commercial Operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 23, after prudence check for determination of tariff:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of tariff:

Provided also that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan for the Licensee for determination of tariff:

Provided also that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Provided further that the premium, if any, raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the transmission system or the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

26.3 Any expenditure incurred or projected to be incurred on or after April 1, 2019, as may be admitted by the Commission, as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in this Regulation.

In accordance with above, since the Petitioner has submitted that the entire capitalisation is funded through equity, equity higher than 30% of capitalisation has been considered as normative loan. Further, as per the submission of the Petitioner no assets haven been created by way of consumer contribution or Government grant.

Therefore, in accordance with the MYT Regulations, 2018, the Commission has determined the Capital Structure for FY 2021-22 as follows:

Table 31: Funding Plan approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	57.38	8.60	8.60
2	Debt (%)	70%	70%	70%
3	Equity (%)	30%	30%	30%
4	Normative Loan	40.17	6.02	6.02
5	Equity	17.21	2.58	2.58

Table 32: GFA addition approved by Commission (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	462.92	475.85	462.92
2	Addition During the FY	57.38	8.60	8.60
3	Adjustment/Retirement During the FY	-	-	-
4	Closing Gross Fixed Assets	520.30	484.45	471.52

Table 33: Normative Loan addition approved by Commission (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	-	1.66	0.00
2	Add: Normative Loan During the year	40.17	6.02	6.02
3	Less: Normative Repayment	12.65	6.02	6.02
4	Closing Normative Loan	27.52	1.66	0.00

Table 34: Normative Equity addition approved by Commission (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	132.93	136.80	132.93
2	Additions on account of new capitalisation	17.21	2.58	2.58
3	Closing Equity	150.14	139.39	135.51

4.12. Depreciation

Petitioner's submission

The Petitioner has considered the closing GFA for the FY 2020-21 amounting to INR 328.08 Cr as opening GFA for the FY 2021-22.

The Petitioner has further submitted that Depreciation has been calculated on basis of the opening GFA & proposed additions during the FY 2021-22 and Weighted Average rate of Depreciation for the year has been worked out based on the individual asset class depreciation rate as specified in Appendix-I of the MYT Regulations, 2018.

Accordingly, the Petitioner has estimated Depreciation of INR 11.49 Cr for FY 2021-22.

Commission's analysis

Regulation 30 of the MYT Regulations, 2018 stipulates the following:

*"**30. Depreciation***

30.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided also that the no depreciation shall be allowed on the assets financed through consumer contribution, deposit work, capital subsidy or grant.

30.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

30.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets.

30.4 In case of existing assets, the balance depreciable value as on April 1, 2019, shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to March 31, 2018, from the gross depreciable value of the assets.

30.5 The depreciation shall be chargeable from the first Year of commercial operations. In case of projected commercial operation of the assets during the Year, depreciation shall be computed based on the average of opening and closing value of assets:

Provided that depreciation shall be re-calculated during truing-up for assets capitalised at the time of truing up of each Year of the Control Period, based on documentary evidence of asset capitalised by the Applicant, subject to the prudence check of the Commission.

30.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

30.7 The depreciation for a Distribution Licensee shall be calculated annually, based on the Straight Line Method, over the Useful Life of the asset at rates specified in Appendix I of the Regulations.

30.8 In addition to allowable depreciation, the Distribution Licensee shall be entitled to advance against depreciation (AAD), computed in the manner given hereunder:

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure, subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations:

Provided that advance against depreciation shall be permitted only if the cumulative repayment upto a particular Year exceeds the cumulative depreciation upto that Year:

Provided further that advance against depreciation in a Year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation upto that Year.

30.9 The Distribution Licensee shall provide the list of assets added during each Year of Control Period and list of assets completing 90% of depreciation in the Year along with Petition for annual performance review, true-up and tariff determination for ensuing Year.

30.10 The remaining depreciable value for a Distribution Licensee shall be spread over the balance useful life of the asset, on repayment of the entire loan."

The Commission has derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in MYT Regulations, 2018, provided in the following table:

Table 35: Depreciation Rate (%)

Description	Rate
Plant & Machinery	3.60%
Buildings	1.80%
Vehicles	18.00%
Furniture & Fixtures	6.00%
Computers & Others	6.00%
Land	0.00%

The closing GFA of FY 2020-21 as approved in the APR of FY 2020-21 vide tariff order dated 30th March 2021 has been considered as opening GFA of FY 2021-22. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition approved for FY 2021-22.

The following table provides the depreciation as approved in the Tariff Order for FY 2021-22, Petitioner's submission and now approved by the Commission:

Table 36: Depreciation approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	337.89	328.08	337.89
2	Addition During the FY	57.38	8.60	8.60
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	395.27	336.68	346.49
5	Average Gross Fixed Assets	366.58	332.38	342.19
6	Effective Rate of Depreciation (%)	3.45%	3.46%	3.45%
	Depreciation	12.65	11.49	11.82

The Commission now approves depreciation of INR 11.82 Cr in the APR of the FY 2021-22.

4.13. Interest on Loan

Petitioner's submission

The Petitioner has considered the opening normative loan same as the closing normative loan of FY 2020-21 as submitted in truing-up section. The normative loan addition in FY 2021-22 has been computed as 70% of the capitalisation proposed during the FY 2021-22.

The repayment of normative loans has been considered equivalent to the depreciation during FY 2021-22. Further, the interest at the SBI MCLR rate as on April 1st, 2021 plus 100 basis points i.e. 8.00% has been applied on the average normative debt in order to project the interest on normative loans for FY 2021-22. Further, the Petitioner has claimed actual Bank Charges of INR 1.35 Cr as incurred during FY 2020-21 for FY 2021-22.

Accordingly, the Petitioner has estimated Interest on Normative Loan of INR 1.42 Cr for FY 2021-22.

Commission's analysis:

The Regulation 28 of the MYT Regulations, 2018 specifies the following:

*"**28. Interest on Loan***

28.1 The loans arrived at in the manner indicated in Regulation 26 on the assets put to use, shall be considered as gross normative loan for calculation of interest on the loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided further that in case of De-capitalisation or retirement or replacement of assets, the loan capital shall be reduced to the extent of outstanding loan component of the original cost of the de-capitalised or retired or replaced assets, based on documentary evidence.

28.2 The normative loan outstanding as on April 1, 2019, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2018, from the gross normative loan.

28.3 Notwithstanding any moratorium period availed by the Transmission Licensee or the Distribution Licensee, as the case may be, the repayment of loan shall be considered from the first Year of commercial operation of the project and shall be equal to the annual depreciation allowed in accordance with Regulation 30.

28.4 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Transmission Licensee or the Distribution Licensee:

Provided that 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 Transmission Licensee or the Distribution Licensee shall be considered as the rate of interest:

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered:

Provided further that if the Transmission Licensee or the Distribution Licensee does not have actual loan, then one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1)Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.

28.5 The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest:

Provided that at the time of truing up, the normative average loan of the Year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the Year.

28.6 For new loans proposed for each Financial Year of the Control Period, interest rate shall be considered as lower of (i) one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1)Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points, and (ii) weighted average rate of interest proposed by the Distribution Licensee.

28.7 The above interest computation shall exclude the interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, deposit work, capital subsidy or grant, carried out by Transmission Licensee or Distribution Licensee.

28.8 The finance charges incurred for obtaining loans from financial institutions for any Year shall be allowed by the Commission at the time of Truing-up, subject to prudence check.

28.9 The excess interest during construction on account of time and/or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Transmission Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

28.10 The Transmission Licensee or the Distribution Licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the equally between the beneficiaries and the Transmission Licensee or the Distribution Licensee and the Consumers of Distribution Licensee.

28.11 Interest shall be allowed on the amount held as security deposit held in cash from Retail Consumers at the Bank Rate as on 1st April of the Financial Year in which the Petition is filed:

Provided that at the time of truing-up, the interest on the amount of security deposit for the Year shall be considered on the basis of the actual interest paid by the Licensee during the Year, subject to prudence check by the Commission."

Hence, the rate of interest to be considered while determining the ARR shall be the weighted average interest rate of the actual loan portfolio. However, the Petitioner has submitted that capitalisation during each year has been funded by the Petitioner's equity and no loan has been taken against any of the capitalised assets.

As per the MYT Regulations 2018, if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Further, the Commission has considered the capitalisation of assets as approved in the foregoing paragraphs. The Commission for the purpose of funding of the capitalisation has considered the normative debt equity ratio of 70:30.

The normative repayment is limited to the remaining loan amount as the same is lesser than the depreciation during the year. In absence of any actual loans, the Commission has considered the SBI MCLR rate plus 100 basis points as Rate of Interest, in accordance with the MYT Regulations, 2018. The Interest on Loan has been calculated on the average loan during the year with the opening loan considered as equivalent to the closing loan approved in the APR of FY 2020-21 vide tariff order dated 30th March 2021.

The Commission has not considered the Bank Charges as the same shall be considered as per actuals during True-up of FY 2021-22.

The following table provides the Interest on Loan approved in the Tariff Order for FY 2021-22, Petitioner's submission and now approved by the Commission:

Table 37: Interest on Loan approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	0.00	1.66	0.00
2	Add: Normative Loan During the year	40.17	6.02	6.02
3	Less: Normative Repayment	12.65	6.02	6.02
4	Closing Normative Loan	27.52	0.00	0.00
5	Average Normative Loan	13.76	0.83	0.00
6	Rate of Interest (%)	8.00%	8.00%	8.00%
7	Interest on Normative Loan	1.10	0.07	0.00
8	Bank Charges	0.00	1.35	0.00
	Interest on Loan	**1.10**	**1.42**	**0.00**

The Commission approves Interest on Loan as nil in the APR of the FY 2021-22.

4.14. Return on Equity (RoE)

Petitioner's submission

The Return on Equity (RoE) is computed in accordance with the Regulation 27 of MYT Regulations, 2018 and is computed on 30% of the capital base. The Petitioner has considered the opening equity same as the closing equity of FY 2020-21 as submitted in truing-up section & 30% of proposed capitalisation for the FY 2021-22 has been considered for arriving at the total equity for the year. Accordingly, the Petitioner has computed the Return on Equity for Wires and Retail Supply Business separately.

Commission's analysis:

The Regulations 27.2 and 27.3 of the MYT Regulations, 2018 stipulate the following:

"27.2 The return on equity for the Distribution Wires Business shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use at post-tax rate of return on equity specified in the prevalent CERC Tariff Regulations for transmission system.

27.3 The return on equity for the Retail Supply Business shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use, at the rate of sixteen (16) per cent per annum."

Further, in this regard, the Regulation 30(2) of the CERC (Terms and Conditions of Tariff) Regulations, 2019 stipulates the following:

*"30. Return on Equity: ……… 30.2 Return on equity shall be computed at the base rate of **15.50%** for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage: ……."* (***Emphasis supplied)***

The Commission has considered the opening equity equivalent to the closing equity approved in the APR of FY 2020-21 vide tariff order dated 30th March 2021. The Commission has segregated the approved average equity (average of opening and closing equity) into average equity for Distribution Wires Business and Retail Supply Business based on the Allocation Statement provided in the MYT Regulations, 2018 i.e. 90% allocation for the Distribution Wires Business and 10% allocation for the Retail Supply Business. The Commission has considered a rate of 15.50% for the Distribution Wires Business (as per the prevalent CERC Regulations as mentioned above) and a rate of 16.00% for the Retail Supply Business. The equity component has been determined in accordance with capital structure as discussed in the section on capital structure. The rate of return on equity for the Distribution Wires Business shall be trued up based on the prevalent CERC Regulations during the True-up of the respective years. The following table provides the total return on equity approved in the Tariff Order for FY 2021-22, Petitioner's submission and now approved by the Commission:

Table 38: RoE approved by the Commission for the FY 2021-22 (In INR Cr)

Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
Opening Equity	132.93	136.80	132.93
Additions on account of new capitalization	17.21	2.58	2.58
Closing Equity	150.14	139.39	135.51
Average Equity	141.53	138.10	134.22
Average Equity (Wires Business)	127.38	124.29	120.79
Average Equity (Retail Supply Business) Business)	14.15	13.81	13.42
Return on Equity for Wires Business (%)	15.50%	15.50%	15.50%
Return on Equity for Retail Supply Business (%)	16.00%	16.00%	16.00%

Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
Return on Equity for Wires Business	19.74	19.26	18.72
Return on Equity for Retail Supply Business	2.26	2.21	2.15
Return on Equity	**22.01**	**21.47**	**20.87**

The Commission approves the Return on Equity of INR 20.87 Cr in the APR of the FY 2021-22. Any Income Tax, paid by the Petitioner on return on equity, shall be allowed by the Commission at the time of true up based on actual figures.

4.15. Interest on Consumer Security Deposits

Petitioner's submission

The Petitioner has considered the opening consumer security deposit based on the actual closing for FY 2020-21. Further, to estimate the closing value of FY 2021-22, EWEDC has taken into account the percentage increase in number of consumers from FY 2020-21 to FY 2021-22. Based on the percentage increase observed in number of consumers during FY 2021-22, the opening value of consumer security deposit of FY 2021-22 has been escalated to arrive at the closing value of consumer security deposit during FY 2021-22. The Bank Rate for working out the consumer security has been considered as RBI Bank Rate prevailing on 1st April 2021. The Petitioner has estimated that total addition during the year shall be Rs. 3.66 Crores. The following table summarizes the Petitioner' submission for Interest on Consumer Security Deposits:

Table 39: Interest on Security Deposits as submitted by the Petitioner (In INR Cr)

S. No	Particulars	Petitioner's Submission
1	Opening Security Deposit	190.10
2	Net addition during the year	3.66
3	Closing Security Deposit	193.76
4	Average Security Deposit	191.93
5	Rate of Interest (%)	4.25%
6	**Interest on Security Deposit**	**8.16**

Commission's analysis:

Regulation 28.11 of the MYT Regulations, 2018 stipulates the following:

"28.11 Interest shall be allowed on the amount held as security deposit held in cash from Retail Consumers at the Bank Rate as on 1st April of the Financial Year in which the Petition is filed:

Provided that at the time of truing-up, the interest on the amount of security deposit for the Year shall be considered on the basis of the actual interest paid by the Licensee during the Year, subject to prudence check by the Commission. "

The Interest on security deposits has been calculated in accordance with the MYT Regulations 2018, based on the average of the opening and closing consumer security deposits during the year. In accordance with the Petitioner's submission, the Commission has considered a net addition of INR 3.66 Cr in the consumer security deposits during the year. The rate of interest has been considered equivalent the RBI Bank Rate as on 1st April of the Financial Year in which the Petition is filed.

The following table provides the computation of interest on consumer security deposits approved in the Tariff Order for FY 2021-22, Petitioner's submission and now approved by the Commission:

Table 40: Interest on Security Deposits approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Opening Security Deposit	203.72	190.10	203.72
2	Net addition during the year	8.00	3.66	3.66
3	Closing Security Deposit	211.72	193.76	207.38
4	Average Security Deposit	207.72	191.93	205.55
5	Rate of Interest (%)	4.65%	4.25%	4.25%
6	**Interest on Security Deposit**	**9.66**	**8.16**	**8.74**

The Commission approves Interest on Security Deposit as INR 8.74 Cr in the APR of the FY 2021-22.

4.16. Interest on Working Capital

Petitioner's submission

The Petitioner has determined the interest on working capital in accordance with the MYT Regulations, 2018.

The working capital requirement for the Control Period has been computed considering the following parameters:

(a) Receivable of two months of billing

(b) O&M Expenses of one month

(c) 40% of Repair & maintenance expenses for one month

(d) Less consumer security deposit but excluding Bank Guarantee

The Interest on Working Capital is computed at the SBI 1 Year MCL as on 1st April, 2020 plus 200 basis points at 9.75%.

Commission's analysis:

The Regulation 52 of the MYT Regulations, 2018 stipulates the following:

*"**52. Norms of Working Capital for Distribution Wires Business***

52.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Distribution Wires Business for the Financial Year, computed as follows:

(a) O&M Expenses for one (1) month; plus

(b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus

(c) Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution

wires at the prevailing tariff;

Less:

(d) Amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from distribution system users except the security deposits held in the form of Bank Guarantees:

Provided that at the time of truing up for any Year, the working capital requirement shall be re-calculated on the basis of the values of components of working capital approved by the Commission in the truing up.

Further, Regulation 31.3 of the MYT Regulation, 2018 stipulates the following:

"31.3 The interest on working capital shall be a payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures. 31.4 The rate of interest on working capital shall be equal one (1)Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1)Year period, as may be applicable as on 1st April of the Financial Year in which the Petition is filed plus 200 basis points."

In accordance with the MYT Regulation, 2018, the Commission has computed the Interest on Working Capital for FY 2021-22. The actual Working Capital requirement, after deduction of the average amount of Consumer Security Deposit is coming out to be negative. Thus, the Interest on Working Capital has been considered as Nil, as shown in the following table:

Table 41: Interest on Working Capital approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	O&M Expense for 1 month	8.27	8.27	8.45
2	Maintenance spares at 40% of R&M expenses for one (1) month;	0.37	0.37	0.37
3	Receivables equivalent to two (2) months of the expected revenue from charges at the prevailing tariff	141.72	126.89	130.69
4	Less: Amount, held as security deposits	207.72	193.76	205.55
5	Net Working Capital	(57.35)	(58.23)	(66.04)
6	Rate of Interest (%)	9.75%	9.00%	9.00%
	Interest on Working Capital	**0.00**	**0.00**	**0.00**

The Commission approves the Interest on Working Capital as nil in the APR of the FY 2021-22.

4.17. Income Tax

Petitioner's submission

No submissions have been made in this regard.

Commission's analysis:

For the FY 2021-22 no income tax liability is computed and the same shall be Trued-up based on the actual income tax paid by the Petitioner.

Table 42: Income tax approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	**Income Tax**	**0.00**	**0.00**	**0.00**

The Commission approved Nil income tax liability for the FY 2021-22.

4.18. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has submitted that in accordance with Clause 62 of JERC MYT Regulations, 2018, the licensee gets the receivables audited, allow actual provision for bad debts up to 1% of receivables in the revenue requirement of the licensee.

The Petitioner has not claimed any expense under Provision for Bad and Doubtful Debt as EWEDC has not written-off any bad debt during FY 2020-21. Further, EWEDC in line with the ruling of Commission is also not claiming any expense under Provision for Bad and Doubtful Debt during FY 2021-22.

Commission's analysis

The Regulation 62 of the MYT Regulations, 2018 stipulates the following

"62. Provision for bad and doubtful debts

62.1 The Commission may allow bad debts written off as a pass through in the Aggregate Revenue Requirement, based on the trend of write off of bad debts in the previous years, subject to prudence check:

Provided that the Commission shall true up the bad debts written off in the Aggregate Revenue Requirement, based on the actual write off of bad debts excluding delayed payment charges waived off, if any, during the year, subject to prudence check:

Provided also that the provision for bad and doubtful debts shall be limited to 1% of the annual Revenue Requirement of the Distribution Licensee:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realised from such bad debt, the same shall be included as an uncontrollable item under the Non-Tariff Income of the year in which such revenue is realized."

The Commission also has not considered any Provision for Bad & Doubtful Debts for the MYT Control Period. The same shall be accounted for as per actuals in the True-up of respective years.

The following table provides the Provision of Bad & Doubtful Debts approved in the Tariff Order for FY 2021-22, Petitioner's submission and now approved by the Commission:

Table 43: Provision of Bad & Doubtful Debts approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	**Provision of Bad & Doubtful Debts**	**0.00**	**0.00**	**0.00**

The Commission approves Provision of Bad & Doubtful Debts as nil in the APR of the FY 2021-22.

4.19. Non-Tariff Income

Petitioner's submission

The non-tariff income for the FY 2021-22 has been estimated as INR 17.77 Cr based on the non-tariff income approved by the Commission.

Commission's analysis:

In absence of any precise methodology for projecting the NTI, the Commission, for the APR of FY 2021-22 has considered the same NTI as proposed by the Petitioner. The same shall be Trued-up on actual basis.

The NTI approved in the Tariff Order for FY 2021-22, the Petitioner's submission and now approved by the Commission is shown in the following table:

Table 44: Non-Tariff Income approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	**Non- Tariff Income**	**17.77**	**17.77**	**17.77**

The Commission now approves Non-Tariff Income of INR 17.77 Cr in the APR of the FY 2021-22.

4.20. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses detailed above, the net aggregate revenue requirement of INR 798.83 Cr is submitted after adjusting the Non -Tariff Income for the FY 2021-22.

Commission's analysis

On the basis of the detailed analysis of the cost parameters of the ARR, the revenue requirement in the APR of the FY 2021-22 is approved as follows:

Table 45: Aggregate Revenue Requirement approved by the Commission for the FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost (inclusive of cost towards RPO)	715.35	700.85	650.52*
2	Operation & Maintenance Expenses	99.22	99.23	101.43
3	Depreciation	12.65	11.49	11.82
4	Interest on Loan	1.10	1.42	0.00
5	Return on Equity	22.01	21.47	20.87
6	Interest on Security Deposit	9.66	8.16	8.74
7	Interest on Working Capital	0.00	0.00	0.00
8	Income Tax	0.00	0.00	0.00
9	Provision for Bad & Doubtful Debt	0.00	0.00	0.00
10	**Total Revenue Requirement**	**860.00**	**842.96**	**793.37**
11	Less: Non-Tariff Income	17.77	17.77	17.77
	Net Revenue Requirement	**842.23**	**824.85**	**775.60**
**After adjusting for excess power procured due to higher T&D losses*				

The Commission approves the net ARR of INR 775.60 Cr in the APR of the FY 2021-22.

4.21. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has calculated the revenue from sale of power at existing tariff on the basis of energy sales in the territory for the FY 2021-22 of INR 761.34 Cr. Besides no FPPCA has been billed during the FY 2021-22 as per Commission's order dated 30th March 2021 wherein the Commission has ruled that no FPPCA shall be recovered from the consumers from 1st April 2021 onwards till further orders of the Commission. Further, the Commission had discontinued the Regulatory Surcharge from the FY 2019-20. EWEDC in line with the order of Commission is not billing any Regulatory Surcharge for FY 2021-22.

The Petitioner vide memo no. SEE/OP/C1/2022/210/951 dated 27.5.2022 has submitted the revised provisional revenue of INR 685.30 Cr for sales of 1501.44 MUs during FY 2021-22.

Table 46: Revenue at existing tariff as submitted by the Petitioner (In INR Cr)

Sr. No.	Category of Consumers	Approved in T.O. dated 30th May, 2020	FY 2021-22 (Estimated)
A	Domestic – LT	392.76	261.66
B	Domestic – HT	15.52	9.40
C	Commercial – LT	149.57	116.99
D	Commercial – HT	166.81	121.29
E	Large Supply	77.25	64.91
F	Medium Supply	64.19	58.12
G	Small Power	9.65	7.85
H	Agriculture	0.43	0.26
I	Public Lighting	8.79	3.12
J	Bulk Supply	52.08	38.98
K	Others Temporary Supply	3.40	2.73
	Total	**940.45**	**685.30**

Commission's analysis

The Commission observed that the revenue submitted by the Petitioner is very low. The Commission analysed the category-by-category revenue and it seemed to be lower than the approved tariff. The category wise/ sub-category wise and slab-wise revenue at existing retail tariff is calculated as per the tariff rates applicable for FY 2021-22. The revenue from demand charges and the energy charges have been projected for each category/ sub-category and slab. The Commission has considered suitable assumptions wherever necessary. The Commission directs the Petitioner to submit slab-wise revenue with bifurcation of fixed and variable along with the next tariff petition. The revenue from category/ sub-category/ slab-wise revenue as computed by the Commission for FY 2021-22 has been shown in the following table:

Table 47: Revenue at existing tariff computed by Commission (In INR Cr)

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)
1	**DOMESTIC SUPPLY (DS)**	**770.27**	**11.01**	**334.91**	**345.92**	**4.49**
A	LT Domestic					
1	0-150 units	61.54	2.88	15.39	18.27	2.97
2	151-400 units	224.85	3.80	95.56	99.36	4.42
3	401 and above units	454.05	3.90	211.13	215.03	4.74
B	HT Domestic	29.83	0.43	12.83	13.26	4.45

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)
2	**COMMERCIAL / NON RESIDENTIAL (NRS)**	**402.16**	**56.57**	**193.94**	**250.52**	**6.23**
A	LT Commercial					
1	0-150 units (Single Phase)	3.84	0.51	1.73	2.24	5.83
2	151-400 units (Single Phase)	11.16	0.24	5.25	5.49	4.92
3	401 and above units (Single Phase)	20.02	0.12	10.01	10.13	5.06
1	0-150 units (Three Phase)	0.30	0.04	0.14	0.18	5.97
2	151-400 units (Three Phase)	4.87	0.71	2.29	3.01	6.17
3	401 and above units (Three Phase)	146.99	21.55	73.49	95.04	6.47
B	HT Commercial	214.98	33.39	101.04	134.43	6.25
3	**INDUSTRY**	**232.09**	**31.55**	**101.17**	**132.72**	**5.72**
1	Large Industrial Power Supply (LS)	117.48	14.41	52.87	67.27	5.73
2	Medium Industrial Power Supply (MS)	98.26	16.28	41.27	57.55	5.86
3	Small Industrial Power Supply (SP)	16.35	0.87	7.03	7.90	4.83
4	**AGRICULTURAL PUMPING SUPPLY(AR)**	**1.44**	**0.00**	**0.38**	**0.38**	**2.60**
1	Agricultural Pumping Supply	1.44	0.00	0.38	0.38	2.60
5	**PUBLIC LIGHTING (PL)**	**14.75**	**0.56**	**7.08**	**7.64**	**5.18**
6	**Bulk Supply (BS)**	**77.17**	**10.12**	**33.95**	**44.07**	**5.71**
1	Bulk Supply	77.17	10.12	33.95	44.07	5.71
7	**Temporary Supply**	**3.56**	**0.00**	**2.88**	**2.88**	**8.09**
1	Temporary Supply	3.56	0.00	2.88	2.88	8.09
8	**Electric Vehicle Charging Station**	-	-	-	-	-
1	Electric Vehicle Charging Station	-	-	-	-	-
	TOTAL	**1501.44**	**109.83**	**674.30**	**784.13**	**5.22**

The Commission has determined revenue from sale of power at existing tariff as INR 784.13 Cr in the APR of the FY 2021-22.

4.22. Standalone Revenue Gap/ (Surplus)

Petitioner's submission

Based on the ARR and the revenue from retail tariff, the standalone revenue gap of INR 63.51 Cr is arrived at in the APR for the FY 2021-22.

Commission analysis

The Standalone Revenue Gap/Surplus is arrived at and approved as follows:

Table 48: Standalone Revenue Gap/ (Surplus) at existing tariff (In INR Cr)

S. No	Particulars	Approved in Tariff Order for FY 2021-22	Petitioner's Submission	Now Approved by Commission
1	Annual Revenue Requirement	**842.23**	**824.85**	**775.60**
2	Revenue from sale of power at existing tariff	940.44	685.30	784.13
3	FPPCA	-	-	-
4	Regulatory Surcharge	-	-	-
	Revenue Gap/(Surplus)	**(98.21)**	**139.55**	**(8.53)**

The standalone surplus at existing retail tariff is INR 8.53 Cr in the APR of the FY 2021-22. The estimated surplus is carried over to the next year and has been considered while determining the tariff for the FY 2022-23.

5. Chapter 5: Determination of Aggregate Revenue Requirement for the 3rd MYT Control Period

5.1. Background

In this Chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for the 3rd MYT Control Period. The determination of Aggregate Revenue Requirement has been done in accordance with the JERC MYT Regulations, 2021.

5.2. Approach for determination of ARR for each year of the 3rd MYT Control Period

The Commission has computed the individual elements constituting the Aggregate Revenue Requirement for each year based on figures approved in the Business Plan Order dated 11th July 2022 and the provisional information of various parameters for the previous financial years. The ARR has been determined for each financial year of the 3rd Control Period whereas the revenue at existing tariff is determined only for the FY 2022-23 to arrive at the revenue gap/surplus for the FY 2022-23.

5.3. Projection of Number of consumers, Connected Load and Energy Sales

Petitioner's Submission

The Petitioner has considered the same number of consumers, connected load and energy sales as proposed by the Petitioner in the Business Plan.

Table 49: Category-wise number of consumers proposed by the Petitioner for 3rd MYT Control Period

Sl. No.	Particulars	Projected No. of Consumers		
		FY 2022-23	FY 2023-24	FY 2024-25
1	Domestic (LT + HT)	204,724	208,011	211,350
2	Non-Domestic (LT+ HT)	28,521	29,772	31,078
3	Large Supply	95	95	95
4	Medium Supply	1,443	1,443	1,443
5	Small Power	1,492	1,508	1,525
6	Agriculture	122	123	124
7	Public Lighting	1,580	1,672	1,770
8	Bulk Supply	531	531	531
9	Others Temporary Supply	448	448	448
	Total	**238,957**	**243,603**	**248,363**

Table 50: Category-wise connected load (kW) proposed by the Petitioner for 3rd MYT Control Period

Sl. No.	Particulars	Proposed Connected Load (kW)		
		FY 2022-23	FY 2023-24	FY 2024-25
1	Domestic (LT + HT)	972,548	1,005,234	1,039,019
2	Non-Domestic (LT+ HT)	534,021	556,553	580,037
3	Large Supply	67,983	67,983	67,983
4	Medium Supply	78,758	78,758	78,758

Sl. No.	Particulars	Proposed Connected Load (kW)		
		FY 2022-23	FY 2023-24	FY 2024-25
5	Small Power	25,310	26,155	27,027
6	Agriculture	917	950	985
7	Public Lighting	4,933	5,055	5,180
8	Bulk Supply	41,746	41,784	41,822
9	Others Temporary Supply	2,136	2,136	2,136
	Total	**1,728,351**	**1,784,609**	**1,842,948**

Table 51: Category-wise energy sales (MUs) proposed by the Petitioner for 3rd MYT Control Period

Sl. No.	Particulars	Projected Sales (MU)		
		FY 2022-23	FY 2023-24	FY 2024-25
1	Domestic (LT + HT)	759.21	796.10	834.78
2	Non-Domestic (LT+ HT)	484.49	491.76	499.13
3	Large Supply	123.76	125.12	126.49
4	Medium Supply	106.38	106.38	106.38
5	Small Power	18.43	18.43	18.43
6	Agriculture	1.41	1.45	1.49
7	Public Lighting	14.78	14.78	14.78
8	Bulk Supply	82.88	84.87	86.91
9	Others Temporary Supply	4.20	4.20	4.20
	Total	**1595.55**	**1643.08**	**1692.58**

Commission's analysis

The Commission in the Business Plan Order dated 11th July 2022 had estimated the category wise energy sales, number of consumers and connected load based on historical trends. The detailed methodology has been discussed in the Business Plan Order for the 3rd MYT Control Period. The Commission retains the same energy sales, connected load and number of consumers as approved in the Business Plan.

Table 52: Category-wise number of consumers approved by the Commission for 3rd MYT Control Period

Sl. No.	Consumer Category	Consumer growth projections			
		Base Year (Provisional)	Control Period (Approved)		
		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
1	Domestic (LT + HT)	200,945	203,356	205,797	208,266
2	Non-Domestic (LT+ HT)	26,625	27,461	28,323	29,213
3	Large Supply	110	111	111	112
4	Medium Supply	1,474	1,478	1,483	1,487
5	Small Power	1,502	1,514	1,527	1,539
6	Agriculture	122	122	122	123
7	Public Lighting	1,519	1,633	1,755	1,886
8	Bulk Supply	533	533	533	533
9	Others Temporary Supply	446	446	446	446
	Total	**233,276**	**236,654**	**240,097**	**243,604**

Table 53: Category-wise connected load (kW) approved by the Commission for 3rd MYT Control Period

Sl. No.	Consumer Category	Connected load growth projections (kW)			
		Base Year (Provisional)	Control Period (Approved)		
		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
1	Domestic (LT + HT)	922,872	941,699	960,910	980,512
2	Non-Domestic (LT+ HT)	504,304	515,348	526,634	538,167

Sl. No.	Consumer Category	Connected load growth projections (kW)			
		Base Year (Provisional)	Control Period (Approved)		
		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
3	Large Supply	73,244	73,244	73,244	73,244
4	Medium Supply	80,859	80,859	80,859	80,859
5	Small Power	24,431	25,039	25,663	26,302
6	Agriculture	923	950	977	1,006
7	Public Lighting	4,709	4,709	4,709	4,709
8	Bulk Supply	42,648	42,648	42,648	42,648
9	Others Temporary Supply	1,539	1,539	1,539	1,539
	Total	**1,655,529**	**1,686,035**	**1,717,183**	**1,748,987**

Table 54: Category-wise energy sales (MU) approved by the Commission for 3rd MYT Control Period

Sl. No.	Consumer Category	Energy sales growth projections (MU)			
		Base Year (Provisional)	Control Period (Approved)		
		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
1	Domestic (LT + HT)	770.27	798.15	827.05	856.99
2	Non-Domestic (LT+ HT)	402.16	406.67	411.22	415.83
3	Large Supply	117.48	118.77	120.08	121.40
4	Medium Supply	98.26	98.26	98.26	98.26
5	Small Power	16.35	16.35	16.35	16.35
6	Agriculture	1.44	1.49	1.53	1.57
7	Public Lighting	14.75	14.75	14.75	14.75
8	Bulk Supply	77.17	78.25	79.34	80.45
9	Others Temporary Supply	3.56	3.56	3.56	3.56
	Total	**1,501.44**	**1,536.24**	**1,572.14**	**1,609.16**

5.4. Inter-State transmission loss

Petitioner's Submission

The Petitioner had submitted Inter-State Transmission Losses for the 3rd MYT Control as follows:

Table 55: Inter-state transmission losses considered by the Petitioner for FY 2021-22 and the 3rd MYT Control Period

Particulars	Projections			
	Base Year FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Inter-State transmission loss	4.03%	4.03%	4.03%	4.03%

Commission's analysis

The Commission accepts the projections submitted by the Petitioner. The same shall be revised based on actuals during the truing up of the respective years as per respective Regulations. The following table provides the Inter-State Transmission Losses approved by the Commission for the 3rd MYT Control Period:

Table 56: Inter-state losses approved by the Commission for 3rd MYT Control Period

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Inter-State transmission loss	4.03%	4.03%	4.03%

5.5. Intra-State Transmission & Distribution (T&D) Losses

Petitioner's Submission

The Petitioner has submitted that it has been working hard to reduce its distribution losses to the targets approved by the Commission in the 2nd MYT Control Period. The Petitioner has reduced some of its distribution loss with the help of NIELIT Chandigarh Centre which has been pioneer in introducing computerization of Electricity & Water Billing in the northern states of Punjab, Haryana, UT Chandigarh. The Petitioner has submitted that the actual distribution loss for FY 2020-21 is 13.81%. The Petitioner has submitted Intra-State Distribution Losses for the 3rd MYT Control Period which are as follows:

Table 57: Intra-State Distribution Losses (%) submitted by the Petitioner

Consumer Category	FY 2022-23	FY 2023-24	FY 2024-25
Intra-state T&D losses	13.06%	12.81%	12.56%

Commission's analysis

The Commission has approved the Intra-State T&D losses approved in Business Plan of 3rd MYT Control Period in Order dated 11th July 2022.

Table 58: Intra-State Distribution Losses (%) approved by the Commission

Consumer Category	FY 2022-23	FY 2023-24	FY 2024-25
Intra-state T&D losses	8.80%	8.40%	8.00%

5.6. Power Purchase Quantum & Cost

Petitioners Submission

1. **Power Purchase Quantum**

The power purchase quantum for the 3rd MYT Control period has been considered as the quantum projected by the petitioner in Business Plan petition for FY 2022-23 to FY 2024-25. The Petitioner has submitted that EWEDC does not have any generation capacity of its own and it relies entirely on the allocation of power from the Central Generating Stations like NTPC, NHPC, BBMB, NPCIL, SJVNL, APCPL, etc.

The Petitioner has further submitted that in addition to existing sources, EWEDC has one major addition in current year i.e., SECI's (WIND) contracted capacity of 40 MW. EWEDC has started procuring power from this source from May 2021, with annual minimum offtake of 151.48 MU which shall help in fulfilling peak energy requirements as well as meeting Non-Solar RPO of the Licensee. The Petitioner has considered the projections from this source based on provisional CUF of 35.98% as provided by SECI, which in turn works out to an yearly generation of 125.73 MU.

The energy available from CREST has also been considered.

2. **Power Purchase Cost**

The Petitioner has submitted in Business Plan petition that EWEDC had submitted the power purchase procurement plan along with power purchase cost. Following assumptions have been considered for projecting the cost of power purchase:

Fixed Charges: The Petitioner has submitted that the Fixed costs for the Control Period has still not been issued by CERC for most of the Plant, therefore, the Petitioner has considered actual fixed charges paid to the plant in Q1 of FY 2021-22 and extrapolated them to arrive at the revised projections of base year FY 2021-22 for respective Central Generating Stations. Further, the fixed charges for the Control Period have been projected considering the Fixed Charges as applicable for FY 2021-22 with 3% escalations for Central Generation Stations.

Variable Charges: The Petitioner has considered the actual per unit variable costs of FY 2021-22 Q1 and has calculated the revised projections of base year FY 2021-22 w.r.t to power purchase projections for respective Central Generating Stations. Further, for the Control Period FY 2022-23 to FY 2024-25, the Petitioner has assumed an escalation of 3% per year for projecting the variable charges for Central Generation Stations.

Solar and Non-solar: For Non-Solar firm power (Wind), the rates as per the PSA are considered for the entire Control Period from FY 2022-23 to FY 2024-25 without any escalation.

For Solar from within the state, the actual amount paid for settlements in FY 2020-21 is considered with 0.00% y-o-y increase for the purpose of estimation of the variable charges for the Control Period.

For Short-term Purchase/Sale per unit variable charge of FY 2021-22 Q1 including trading margins and other charges have been calculated and considered for the revised estimates of base year FY 2021-22 and are considered for the entire Control Period from FY 2022-23 to FY 2024-25 without any escalation.

Other Charges: The Petitioner has considered actual other charges paid in Q1 of FY 2021-22 and extrapolated them to arrive at the revised projections of base year FY 2021-22 for respective Central Generating Stations. The other charges for the Control Period have been projected considering the Other Charges as applicable for FY 2021-22 without any escalation.

EWEDC envisages to meet its RPO obligation through purchase of physical renewable power and may even exceed the RPO obligations as cheap power is available in the market in comparison to the conventional sources. Further, for the Control Period, since the Commission has not yet approved any trajectory, EWEDC has assumed a 1% increase in Solar and Non-Solar RPO every year on approved values of FY 2021-22 in previous control period and has accordingly considered the projections for RPO fulfilment on sales from conventional sources. Further, after considering all the proposed tied-up renewable energy, EWEDC has proposed to meet any shortfall to fulfil the RPO obligation, through purchase from short-term (Traders) through DEEP portal, GTAM. For projections, EWEDC does not plan to buy any REC during the control period.

Transmission Charges: The Petitioner has considered the actual transmission charges for H1 of FY 2021-22 and calculated the transmission charges per unit for PGCIL. The same charge has been considered for computation of Transmission charges for the control period with 3.00% y-o-y escalations.

The total power purchase quantum and cost for each year of the MYT control period is as under:

Table 59: Power Purchase quantum (MU) and Cost (In INR Cr) submitted by Petitioner for the 3rd Control Period

Sr. No.	Source	Projections of Energy Quantum			Power Purchase Cost - Fixed Cost (FC) (Rs. Cr)			Power Purchase Cost - Variable Cost (VC)			Power Purchase Cost - Other Cost (OC)			Total Power Purchase Cost		
					Projections (FC Rs. Cr.)			Projections (VC- Rs. Cr.)			Projections (OC- Rs. Cr.)			Projections (VC+FC+OC) (Rs. Cr.)		
		2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25
A	Central Sector Power Stations (Hydro)	1,432.47	1,432.47	1,432.47	121.68	125.33	129.09	307.80	317.03	326.54	10.22	10.22	10.22	439.69	452.58	465.85
I	NTPC (Hydro)	53.12	53.12	53.12	15.03	15.48	15.95	13.47	13.87	14.29	-	-	-	28.50	29.35	30.23
1	Koldam	52.92	52.92	52.92	15.03	15.48	15.95	13.37	13.77	14.18	-	-	-	28.40	29.25	30.13
2	Singrauli Hydro	0.20	0.20	0.20	-	-	-	0.10	0.11	0.11	-	-	-	0.10	0.11	0.11
II	NHPC	343.34	343.34	343.34	62.12	63.99	65.90	55.26	56.92	58.63	0.05	0.05	0.05	117.43	120.96	124.58
3	Dhulsati	42.54	42.54	42.54	14.20	14.62	15.06	12.05	12.41	12.78	0.01	0.01	0.01	26.25	27.03	27.84
4	Parbati-III	15.84	15.84	15.84	6.89	7.09	7.31	2.51	2.59	2.66	0.01	0.01	0.01	9.40	9.69	9.98
5	Uri-II	29.12	29.12	29.12	8.60	8.86	9.12	6.40	6.59	6.78	0.00	0.00	0.00	15.00	15.45	15.91
6	Sewa-II	14.96	14.96	14.96	-	-	-	3.90	4.02	4.14	0.00	0.00	0.00	3.90	4.02	4.14
7	Chamera-III	24.02	24.02	24.02	6.39	6.58	6.78	4.87	5.02	5.17	0.00	0.00	0.00	11.27	11.61	11.96
8	Tanakpur	5.80	5.80	5.80	0.93	0.96	0.99	0.99	1.01	1.05	0.00	0.00	0.00	1.92	1.98	2.04
9	Dhauliganga Ganga	30.99	30.99	30.99	4.58	4.72	4.86	3.88	3.99	4.11	0.00	0.00	0.00	8.46	8.71	8.98
10	Chamera-I	102.50	102.50	102.50	8.61	8.87	9.14	12.05	12.41	12.78	0.01	0.01	0.01	20.67	21.29	21.93
11	Chamera-II	32.63	32.63	32.63	4.83	4.98	5.13	3.38	3.48	3.58	0.01	0.01	0.01	8.21	8.46	8.71
12	Uri	20.53	20.53	20.53	1.84	1.90	1.95	1.74	1.79	1.84	0.00	0.00	0.00	3.58	3.69	3.80
13	Salal	10.30	10.30	10.30	0.83	0.85	0.88	0.65	0.67	0.69	0.00	0.00	0.00	1.48	1.53	1.57
14	Kishan Ganga	14.09	14.09	14.09	4.43	4.56	4.69	2.86	2.94	3.03	0.00	0.00	0.00	7.29	7.50	7.73
III	THDC	186.40	186.40	186.40	22.82	23.50	24.21	40.38	41.59	42.84	0.01	0.01	0.01	63.22	65.11	67.07
15	Tehri	169.92	169.92	169.92	20.28	20.89	21.52	36.46	37.55	38.68	0.01	0.01	0.01	56.75	58.45	60.21
16	Koteshwar	16.48	16.48	16.48	2.54	2.61	2.69	3.93	4.05	4.17	0.00	0.00	0.00	6.47	6.66	6.86
IV	SJVNL	138.42	138.42	138.42	21.71	22.36	23.03	18.34	18.89	19.46	0.01	0.01	0.01	40.06	41.26	42.50
17	Rampur	20.43	20.43	20.43	5.72	5.89	6.07	4.51	4.64	4.78	0.00	0.00	0.00	10.23	10.53	10.85
18	Nathpa Jhakri	118.00	118.00	118.00	15.99	16.47	16.96	13.83	14.25	14.67	0.01	0.01	0.01	29.83	30.72	31.65
V	BBMB	711.20	711.20	711.20	-	-	-	180.35	185.76	191.33	10.14	10.14	10.14	190.49	195.90	201.47
19	Bhakhra	600.18	600.18	600.18	-	-	-	180.35	185.76	191.33	10.14	10.14	10.14	180.63	185.76	191.33
20	Dehar	91.50	91.50	91.50	-	-	-	-	-	-	-	-	-	-	-	-
21	Pong	19.52	19.52	19.52	-	-	-	-	-	-	-	-	-	-	-	-
B	Central Sector Power Stations (Thermal/Gas/Nuclear)	564.97	564.97	564.97	96.49	99.38	102.36	148.81	153.27	157.87	0.10	0.10	0.10	245.39	252.75	260.33
VI	APCPL Thermal	20.96	20.96	20.96	15.88	16.36	16.85	7.23	7.44	7.67	0.00	0.00	0.00	23.11	23.81	24.52

Sr. No.	Source	Projections of Energy Quantum			Power Purchase Cost - Fixed Cost (FC) (Rs. Cr) Projections (FC Rs. Cr.)			Power Purchase Cost - Variable Cost (VC) Projections (VC- Rs. Cr.)			Power Purchase Cost - Other Cost (OC) Projections (OC- Rs. Cr.)			Total Power Purchase Cost Projections (VC+FC+OC) (Rs. Cr.)		
		2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25
22	*Jhajjar*	20.96	20.96	20.96	15.88	16.36	16.85	7.23	7.44	7.67	0.00	0.00	0.00	23.11	23.81	24.52
VII	***NTPC (Thermal)***	**276.11**	**276.11**	**276.11**	**37.05**	**38.16**	**39.30**	**54.89**	**56.53**	**58.23**	**-**	**-**	**-**	**91.93**	**94.69**	**97.53**
23	*Dadri-II*	3.45	3.45	3.45	1.52	1.57	1.62	1.09	1.13	1.16	-	-	-	2.62	2.69	2.78
24	*Unchahar-I*	14.56	14.56	14.56	1.68	1.73	1.78	4.79	4.93	5.08	-	-	-	6.46	6.66	6.86
25	*Unchahar-II*	18.64	18.64	18.64	2.57	2.65	2.73	6.19	6.38	6.57	-	-	-	8.77	9.03	9.30
26	*Unchahar-III*	9.31	9.31	9.31	1.26	1.30	1.34	3.06	3.16	3.25	-	-	-	4.32	4.45	4.59
27	*Unchahar-IV*	29.05	29.05	29.05	5.61	5.78	5.95	9.02	9.29	9.57	-	-	-	14.63	15.07	15.52
28	*Kahalgaon-II*	21.62	21.62	21.62	2.35	2.42	2.49	4.24	4.36	4.50	-	-	-	6.59	6.78	6.99
29	*Singrauli*	7.56	7.56	7.56	1.22	1.25	1.29	1.14	1.18	1.21	-	-	-	2.36	2.43	2.50
30	*Rihand-III*	45.86	45.86	45.86	7.36	7.59	7.81	6.25	6.44	6.63	-	-	-	13.61	14.02	14.44
31	*Rihand-I*	61.10	61.10	61.10	6.78	6.98	7.19	8.53	8.78	9.05	-	-	-	15.30	15.76	16.24
32	*Rihand-II*	53.46	53.46	53.46	2.88	2.97	3.06	7.44	7.67	7.90	-	-	-	10.33	10.64	10.95
33	*Tanda-II*	11.49	11.49	11.49	3.82	3.93	4.05	3.13	3.22	3.32	-	-	-	6.95	7.16	7.37
VIII	***MUNPL***	**25.16**	**25.16**	**25.16**	**20.21**	**20.82**	**21.44**	**6.59**	**6.79**	**6.99**	**0.01**	**0.01**	**0.01**	**26.81**	**27.61**	**28.44**
34	*Meja-I*	25.16	25.16	25.16	20.21	20.82	21.44	6.59	6.79	6.99	0.01	0.01	0.01	26.81	27.61	28.44
IX	***NTPC (Gas)***	**38.79**	**38.79**	**38.79**	**23.34**	**24.04**	**24.76**	**9.86**	**10.15**	**10.46**	**-**	**-**	**-**	**33.20**	**34.19**	**35.22**
35	*Dadri G*	27.35	27.35	27.35	8.80	9.06	9.33	7.35	7.57	7.79	-	-	-	16.14	16.63	17.13
36	*Auriya G*	7.82	7.82	7.82	7.93	8.17	8.41	1.74	1.79	1.85	-	-	-	9.67	9.96	10.26
37	*Anta G*	3.61	3.61	3.61	6.61	6.81	7.02	0.77	0.79	0.82	-	-	-	7.38	7.60	7.83
X	***NPCIL***	**203.95**	**203.95**	**203.95**	**-**	**-**	**-**	**70.25**	**72.36**	**74.53**	**0.09**	**0.09**	**0.09**	**70.34**	**72.45**	**74.62**
38	*RAPS5 & 6*	95.43	95.43	95.43	-	-	-	36.66	37.76	38.89	0.05	0.05	0.05	36.71	37.81	38.94
39	*RAPS3 & 4*	19.09	19.09	19.09	-	-	-	6.22	6.40	6.60	0.01	0.01	0.01	6.22	6.41	6.60
40	*NAPS*	89.43	89.43	89.43	-	-	-	27.37	28.19	29.04	0.03	0.03	0.03	27.40	28.22	29.07
C	*RPO Obligation*	-	-	-	-	-	-	41.68	42.79	43.90	-	-	-	41.68	42.79	43.90
XI	***SECI (Wind)***	**125.73**	**125.73**	**125.73**	**-**	**-**	**-**	**34.27**	**34.27**	**34.27**	**-**	**-**	**-**	**34.27**	**34.27**	**34.27**
41	*Tranche-VI*	125.73	125.73	125.73	-	-	-	34.27	34.27	34.27	-	-	-	34.27	34.27	34.27
XII	***Intra-Solar***	**7.38**	**7.38**	**7.38**	**-**	**-**	**-**	**7.42**	**8.53**	**9.63**	**-**	**-**	**-**	**7.42**	**8.53**	**9.63**
42	*CREST, Pvt.Solar & Net Solar*	7.38	7.38	7.38	-	-	-	7.42	8.53	9.63	-	-	-	7.42	8.53	9.63
D	***Sub Total***	**2,130.55**	**2,130.55**	**2,130.55**	**218.16**	**224.71**	**231.45**	**498.29**	**513.09**	**528.31**	**10.32**	**10.32**	**10.32**	**726.77**	**748.12**	**770.08**

Sr. No.	Source	Projections of Energy Quantum			Power Purchase Cost - Fixed Cost (FC) (Rs. Cr) Projections (FC Rs. Cr.)			Power Purchase Cost - Variable Cost (VC) Projections (VC- Rs. Cr.)			Power Purchase Cost - Other Cost (OC) Projections (OC- Rs. Cr.)			Total Power Purchase Cost Projections (VC+FC+OC) (Rs. Cr.)		
		2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25
E	***IEX Purchase/Sale***	-	-	-	-	-	-	**(81.33)**	**(64.25)**	**(46.44)**	-	-	-	**(81.33)**	**(64.25)**	**(46.44)**
	Short- Term Power Sale							(81.33)	(64.25)	(46.44)	-	-	-	(81.33)	(64.25)	(46.44)
	Short- Term Power Purchase															
F	*UI*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	UI Sales	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	UI Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	*Reactive Energy Charges*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	*Other Charges*	-	-	-	104.24	107.37	110.59	-	-	-	-	-	-	104.24	107.37	110.59
	PGCIL Charges and NRLDC Charges	-	-	-	104.24	107.37	110.59	0.00	0.00	0.00	0.00	0.00	0.00	104.24	107.37	110.59
I	**Total**	**2,130.55**	**2,130.55**	**2,130.55**	**322.41**	**332.08**	**342.04**	**416.96**	**448.85**	**481.87**	**10.32**	**10.32**	**10.32**	**749.68**	**791.25**	**834.23**

Commission's analysis:

5.6.1. Power Purchase Quantum

The Commission has observed that the Petitioner in their submission has not deducted the quantum of power sold at the short-term exchange. The power purchase quantum for the 3rd MYT Control Period was approved in the Business Plan Order dated 11th July 2022. The approved power purchase quantum is given in the following table:

Table 60: Power purchase quantum at state periphery approved by the Commission for the 3rd MYT Control Period

Sr. No.	Source	Power Purchase (MUs) MYT Projections		
		2022-23	2023-24	2024-25
A	**Central Sector Power Stations (Hydro)**	**1,345.33**	**1,345.33**	**1,345.33**
I	**NTPC (Hydro)**	**51.72**	**51.72**	**51.72**
1	*Koldam*	50.50	50.50	50.50
2	*Singrauli Hydro*	1.22	1.22	1.22
II	**NHPC**	**347.87**	**347.87**	**347.87**
3	*Dhulsati*	47.81	47.81	47.81
4	*Parbati-III*	14.69	14.69	14.69
5	*Uri-II*	39.27	39.27	39.27
6	*Sewa-II*	12.84	12.84	12.84
7	*Chamera-III*	23.25	23.25	23.25
8	*Tanakpur*	6.35	6.35	6.35
9	*Dhauliganga Ganga*	29.60	29.60	29.60
10	*Chamera-I*	84.06	84.06	84.06
11	*Chamera-II*	36.04	36.04	36.04
12	*Uri*	18.45	18.45	18.45
13	*Salal*	9.50	9.50	9.50
14	*Kishan Ganga*	26.00	26.00	26.00
III	***THDC***	**185.98**	**185.98**	**185.98**
15	*Tehri*	168.13	168.13	168.13
16	*Koteshwar*	17.85	17.85	17.85
IV	***SJVNL***	**141.04**	**141.04**	**141.04**
17	*Rampur*	21.56	21.56	21.56
18	*Nathpa Jhakri*	119.48	119.48	119.48
V	***BBMB***	**618.72**	**618.72**	**618.72**
19	*Bhakhra*	523.12	523.12	523.12
20	*Dehar*	80.97	80.97	80.97
21	*Pong*	14.63	14.63	14.63
B	***Central Sector Power Stations (Thermal/Gas/Nuclear)***	**701.22**	**701.22**	**701.22**
VI	***APCPL Thermal***	**40.43**	**40.43**	**40.43**
22	*Jhajjar*	40.43	40.43	40.43
VII	***NTPC (Thermal)***	**351.75**	**351.75**	**351.75**
23	*Dadri-II*	8.53	8.53	8.53
24	*Unchahar-I*	9.77	9.77	9.77
25	*Unchahar-II*	18.00	18.00	18.00
26	*Unchahar-III*	7.53	7.53	7.53
27	*Unchahar-IV*	27.38	27.38	27.38
28	*Kahalgaon-II*	18.03	18.03	18.03
29	*Singrauli*	30.23	30.23	30.23
30	*Rihand-III*	59.80	59.80	59.80
31	*Rihand-I*	81.24	81.24	81.24

Sr. No.	Source	Power Purchase (MUs) MYT Projections		
		2022-23	2023-24	2024-25
32	*Rihand-II*	69.99	69.99	69.99
33	*Tanda-II*	21.25	21.25	21.25
VIII	***MUNPL***	**54.26**	**54.26**	**54.26**
34	*Meja-I*	54.26	54.26	54.26
IX	***NTPC (Gas)***	**38.17**	**38.17**	**38.17**
35	*Dadri G*	18.63	18.63	18.63
36	*Auriya G*	12.11	12.11	12.11
37	*Anta G*	7.43	7.43	7.43
X	***NPCIL***	**216.62**	**216.62**	**216.62**
38	*RAPS5 & 6*	108.64	108.64	108.64
39	*RAPS3 & 4*	19.84	19.84	19.84
40	*NAPS*	88.14	88.14	88.14
C	*RPO Obligation*	130.26	131.69	133.12
XI	***SECI (Wind)***	***120.66***	***120.66***	***120.66***
41	*Tranche-VI*	120.66	120.66	120.66
XII	***Intra-Solar***	***9.59***	***11.03***	***12.46***
42	*CREST, Pvt.Solar & Net Solar*	9.59	11.03	12.46
D	***Sub Total***	**2,176.80**	**2,178.24**	**2,179.67**
E	***IEX Purchase/Sale***	**(492.33)**	**(461.93)**	**(430.59)**
F	**Total**	**1,684.48**	**1,716.30**	**1,749.08**

5.6.2. Power Purchase Cost

The Commission has computed the power purchase cost for the 3rd MYT Control Period based on the following assumptions:

Fixed Charges:

The fixed charges for the existing plants have been considered based on the actual cost submitted by the Petitioner for FY 2021-22. For Central generating Stations, the Commission has considered an annual escalation of 2% on the actual fixed costs of the FY 2021-22, for each year from FY 2022-23 to FY 2024-25. For the remaining plants, the Commission has accepted the fixed charges submitted by the Petitioner.

Variable Charges:

The variable charges for the existing plants have been considered based on the provisional actual cost submitted by the Petitioner for FY 2021-22. For Central generating Stations, the Commission has considered an annual escalation of 5% on the actual variable costs of the FY 2021-22, for each year from FY 2022-23 to FY 2024-25. For the remaining plants, the Commission has accepted the variable charges submitted by the Petitioner.

Other Charges:

Other charges have not been considered for the 3rd MYT Control Period. The same shall be considered as per actuals during the true-up of the respective years of the 3rd MYT Control Period.

5.6.3. Transmission Charges

The Commission has projected the transmission charges payable to PGCIL based on the actual transmission charges submitted by the Petitioner for FY 2021-22. The Commission has considered an annual escalation of 2% on the actual transmission charges of the FY 2021-22, for each year from FY 2022-23 to FY 2024-25.

5.6.4. Total power purchase quantum and cost

The power purchase quantum (in MUs) and cost (in INR Cr) approved by the Commission for the 3rd MYT Control Period have been shown in the following tables:

Table 61: Power Purchase Quantum (MU) and cost (INR Cr) approved for the 3rd MYT Control Period

Sr. No.	Source	Power Purchase at State Periphery (MUs)			Power Purchase Cost - Fixed Cost (FC) (Rs. Cr)			Power Purchase Cost - Variable Cost (VC)			Total Power Purchase Cost - (Rs. Cr)		
					Projections (FC Rs. Cr.)			Projections (VC- Rs. Cr.)			Projections (FC+VC) Rs. Cr.		
		2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25
A	**Central Sector Power Stations (Hydro)**	**1,345.33**	**1,345.33**	**1,345.33**	**122.94**	**125.40**	**127.91**	**286.93**	**301.27**	**316.34**	**409.87**	**426.67**	**444.24**
I	**NTPC (Hydro)**	**51.72**	**51.72**	**51.72**	**13.58**	**13.85**	**14.13**	**13.64**	**14.33**	**15.04**	**27.23**	**28.18**	**29.17**
1	*Koldam*	50.50	50.50	50.50	13.58	13.85	14.13	13.00	13.65	14.33	26.58	27.50	28.46
2	*Singrauli Hydro*	1.22	1.22	1.22	-	-	-	0.65	0.68	0.71	0.65	0.68	0.71
II	**NHPC**	**347.87**	**347.87**	**347.87**	**52.72**	**53.77**	**54.85**	**58.71**	**61.65**	**64.73**	**111.43**	**115.42**	**119.58**
3	*Dhulsati*	47.81	47.81	47.81	11.67	11.90	12.14	13.19	13.85	14.54	24.86	25.75	26.68
4	*Parbati-III*	14.69	14.69	14.69	6.38	6.51	6.64	2.37	2.49	2.62	8.75	9.00	9.25
5	*Uri-II*	39.27	39.27	39.27	5.32	5.43	5.54	8.45	8.88	9.32	13.78	14.31	14.86
6	*Sewa-II*	12.84	12.84	12.84	0.22	0.23	0.23	3.57	3.75	3.94	3.79	3.98	4.17
7	*Chamera-III*	23.25	23.25	23.25	5.30	5.41	5.52	4.81	5.05	5.30	10.11	10.46	10.82
8	*Tanakpur*	6.35	6.35	6.35	1.13	1.15	1.17	1.08	1.13	1.19	2.21	2.28	2.36
9	*Dhauliganga Ganga*	29.60	29.60	29.60	3.95	4.03	4.11	3.77	3.96	4.16	7.72	7.99	8.27
10	*Chamera-I*	84.06	84.06	84.06	7.45	7.60	7.75	10.07	10.57	11.10	17.52	18.17	18.85
11	*Chamera-II*	36.04	36.04	36.04	4.04	4.12	4.20	3.80	3.99	4.19	7.84	8.11	8.39
12	*Uri*	18.45	18.45	18.45	1.71	1.74	1.78	1.59	1.67	1.76	3.30	3.42	3.53
13	*Salal*	9.50	9.50	9.50	0.73	0.74	0.75	0.61	0.65	0.68	1.34	1.39	1.43
14	*Kishan Ganga*	26.00	26.00	26.00	4.83	4.93	5.02	5.37	5.64	5.93	10.20	10.57	10.95
III	***THDC***	**185.98**	**185.98**	**185.98**	**37.76**	**38.51**	**39.28**	**39.57**	**41.54**	**43.62**	**77.32**	**80.06**	**82.90**
15	*Tehri*	168.13	168.13	168.13	34.12	34.80	35.50	35.25	37.01	38.86	69.37	71.81	74.36
16	*Koteshwar*	17.85	17.85	17.85	3.64	3.71	3.79	4.32	4.53	4.76	7.96	8.24	8.54
IV	***SJVNL***	**141.04**	**141.04**	**141.04**	**18.89**	**19.26**	**19.65**	**19.24**	**20.20**	**21.21**	**38.13**	**39.47**	**40.86**
17	*Rampur*	21.56	21.56	21.56	4.78	4.87	4.97	4.84	5.08	5.33	9.61	9.95	10.30
18	*Nathpa Jhakri*	119.48	119.48	119.48	14.11	14.39	14.68	14.40	15.12	15.88	28.51	29.51	30.56
V	***BBMB***	**618.72**	**618.72**	**618.72**	**-**	**-**	**-**	**155.77**	**163.55**	**171.73**	**155.77**	**163.55**	**171.73**
19	*Bhakhra*	523.12	523.12	523.12	-	-	-	-	-	-	-	-	-
20	*Dehar*	80.97	80.97	80.97	-	-	-	14.16	14.87	15.61	14.16	14.87	15.61
21	*Pong*	14.63	14.63	14.63	-	-	-	141.60	148.69	156.12	141.60	148.69	156.12

Sr. No.	Source	Power Purchase at State Periphery (MUs)			Power Purchase Cost - Fixed Cost (FC) (Rs. Cr) Projections (FC Rs. Cr.)			Power Purchase Cost - Variable Cost (VC) Projections (VC- Rs. Cr.)			Total Power Purchase Cost - (Rs. Cr) Projections (FC+VC) Rs. Cr.		
		2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25
B	***Central Sector Power Stations (Thermal/Gas/Nuclear)***	**701.22**	**701.22**	**701.22**	**92.84**	**94.70**	**96.59**	**189.69**	**199.17**	**209.13**	**282.53**	**293.87**	**305.72**
VI	***APCPL Thermal***	**40.43**	**40.43**	**40.43**	**13.14**	**13.41**	**13.68**	**14.90**	**15.65**	**16.43**	**28.05**	**29.06**	**30.11**
22	*Jhajjar*	40.43	40.43	40.43	13.14	13.41	13.68	14.90	15.65	16.43	28.05	29.06	30.11
VII	***NTPC (Thermal)***	**351.75**	**351.75**	**351.75**	**42.41**	**43.26**	**44.12**	**70.81**	**74.35**	**78.07**	**113.22**	**117.61**	**122.19**
23	*Dadri-II*	8.53	8.53	8.53	1.80	1.83	1.87	2.95	3.09	3.25	4.75	4.93	5.12
24	*Unchahar-I*	9.77	9.77	9.77	1.69	1.72	1.76	3.39	3.56	3.74	5.08	5.28	5.49
25	*Unchahar-II*	18.00	18.00	18.00	2.69	2.74	2.80	6.37	6.69	7.02	9.06	9.43	9.82
26	*Unchahar-III*	7.53	7.53	7.53	1.32	1.34	1.37	2.63	2.77	2.90	3.95	4.11	4.28
27	*Unchahar-IV*	27.38	27.38	27.38	5.70	5.81	5.93	8.96	9.41	9.88	14.66	15.22	15.81
28	*Kahalgaon-II*	18.03	18.03	18.03	2.33	2.37	2.42	4.22	4.43	4.65	6.55	6.81	7.08
29	*Singrauli*	30.23	30.23	30.23	1.44	1.47	1.50	4.83	5.08	5.33	6.28	6.55	6.83
30	*Rihand-III*	59.80	59.80	59.80	7.60	7.75	7.90	8.75	9.19	9.65	16.35	16.94	17.55
31	*Rihand-I*	81.24	81.24	81.24	6.78	6.92	7.06	12.10	12.71	13.34	18.89	19.63	20.40
32	*Rihand-II*	69.99	69.99	69.99	4.62	4.72	4.81	10.46	10.98	11.53	15.09	15.70	16.34
33	*Tanda-II*	21.25	21.25	21.25	6.44	6.57	6.70	6.13	6.44	6.76	12.57	13.01	13.46
VIII	***MUNPL***	**54.26**	**54.26**	**54.26**	**17.13**	**17.48**	**17.82**	**13.80**	**14.49**	**15.22**	**30.94**	**31.97**	**33.04**
34	*Meja-I*	54.26	54.26	54.26	17.13	17.48	17.82	13.80	14.49	15.22	30.94	31.97	33.04
IX	***NTPC (Gas)***	**38.17**	**38.17**	**38.17**	**20.15**	**20.56**	**20.97**	**13.53**	**14.21**	**14.92**	**33.69**	**34.77**	**35.89**
35	*Dadri G*	18.63	18.63	18.63	7.30	7.44	7.59	6.36	6.68	7.01	13.65	14.12	14.60
36	*Auriya G*	12.11	12.11	12.11	6.96	7.10	7.24	5.24	5.50	5.78	12.21	12.61	13.02
37	*Anta G*	7.43	7.43	7.43	5.89	6.01	6.13	1.93	2.03	2.13	7.83	8.04	8.26
X	***NPCIL***	**216.62**	**216.62**	**216.62**	**-**	**-**	**-**	**76.64**	**80.47**	**84.50**	**76.64**	**80.47**	**84.50**
38	*RAPS5 & 6*	108.64	108.64	108.64	-	-	-	42.56	44.68	46.92	42.56	44.68	46.92
39	*RAPS3 & 4*	19.84	19.84	19.84	-	-	-	6.59	6.92	7.26	6.59	6.92	7.26
40	*NAPS*	88.14	88.14	88.14	-	-	-	27.50	28.87	30.32	27.50	28.87	30.32
C	*RPO Obligation*	130.26	131.69	133.12	-	-	-	41.71	42.79	43.88	41.71	42.79	43.88
XI	***SECI (Wind)***	***120.66***	***120.66***	***120.66***	**-**	**-**	**-**	**34.43**	**34.43**	**34.43**	**34.43**	**34.43**	**34.43**
41	*Tranche-VI*	120.66	120.66	120.66				34.43	34.43	34.43	34.43	34.43	34.43

Sr. No.	Source	Power Purchase at State Periphery (MUs)			Power Purchase Cost - Fixed Cost (FC) (Rs. Cr)			Power Purchase Cost - Variable Cost (VC)			Total Power Purchase Cost - (Rs. Cr)		
					Projections (FC Rs. Cr.)			Projections (VC- Rs. Cr.)			Projections (FC+VC) Rs. Cr.		
		2022-23	**2023-24**	**2024-25**	**2022-23**	**2023-24**	**2024-25**	**2022-23**	**2023-24**	**2024-25**	**2022-23**	**2023-24**	**2024-25**
XII	***Intra-Solar***	***9.59***	***11.03***	***12.46***	**-**	**-**	**-**	**7.28**	**8.37**	**9.46**	**7.28**	**8.37**	**9.46**
42	*CREST, Pvt.Solar & Net Solar*	9.59	11.03	12.46				7.28	8.37	9.46	7.28	8.37	9.46
D	***Sub Total***	**2,176.80**	**2,178.24**	**2,179.67**	**215.78**	**220.10**	**224.50**	**518.32**	**543.24**	**569.35**	**734.10**	**763.34**	**793.85**
E	***IEX Purchase/Sale***	**(492.33)**	**(461.93)**	**(430.59)**				**(189.96)**	**(184.76)**	**(178.57)**	**(189.96)**	**(184.76)**	**(178.57)**
	Short- Term Power Sale										-	-	-
	Short- Term Power Purchase										-	-	-
F	*Other Charges*										-	-	-
	PGCIL Charges and NRLDC Charges				105.79	107.91	110.07				105.79	107.91	110.07
G	**Total**	**1,684.48**	**1,716.30**	**1,749.08**	**321.57**	**328.00**	**334.56**	**328.36**	**358.48**	**390.79**	**649.94**	**686.48**	**725.35**

The Average Power Purchase Cost (APPC) for the FY 2022-23 has been determined as provided in the table below. The APPC has been computed at the UT Periphery excluding the transmission charges and cost of purchase of renewable energy. The Petitioner shall use the same for the purpose of compensation/ payment of surplus power at the end of each settlement period in case of Solar Net-metering consumers.

Table 62: Average Power Purchase Cost (APPC) for the FY 2022-23

Particular	FY 2022-23
Total Power Purchase Cost (INR Cr)	649.94
Less: Transmission charges and Power Purchase cost from renewable energy sources (INR Cr)	147.50
Net Power Purchase Cost (INR Cr) (A)	502.44
Total Power Purchase quantum (MU)	1684.48
Less: Quantum from renewable energy sources (MU)	130.26
Quantum of energy at UT Periphery excluding quantum from renewable energy sources (MU) (B)	**1554.22**
APPC (INR/kWh) (A/B)	**3.23**

The Commission approves the Average Power Purchase Cost (APPC) as INR 3.23/ kWh for the FY 2022-23 for the purpose of compensation/payment for excess generation for prosumers.

5.6.5. Energy Balance

Petitioner's Submission

The Petitioner has submitted the energy balance as shown in the following table:

Table 63: Energy Balance submitted by the Petitioner (MU)

Particulars	Energy Balance			
	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Energy sales within the State/UT	1,440.02	1,595.55	1,643.08	1,692.58
Distribution losses				
%	13.31%	13.06%	12.81%	12.56%
MU	221.15	239.74	241.47	243.19
Energy required at State Periphery	**1,661.17**	**1,835.30**	**1,884.55**	**1,935.77**
Energy available at State Periphery	**1653.48**	**1825.70**	**1873.52**	**1923.31**
Availability from firm sources inside the state		9.59	11.03	12.46
Total Energy available at State Periphery		**1,835.30**	**1,884.55**	**1,935.77**

Commission's analysis

Based on the Energy sales, Power Procurement and Inter & Intra-State Loss as approved above the Energy Balance for the 3rd MYT Control Period has been shown in following table:

Table 64: Energy Balance approved by Commission (MU)

Particulars	Approved Projections		
	FY 2022-23	FY 2023-24	FY 2024-25
Energy Required			
Energy sales within the State (A)	1,536.24	1,572.14	1,609.16
T&D Loss (%) (B)	8.80%	8.40%	8.00%
Energy required at State Periphery (C = A/(1-B))	**1,684.48**	**1,716.30**	**1,749.08**

Particulars	Approved Projections		
	FY 2022-23	FY 2023-24	FY 2024-25
Within State Generation (Co-Gen) (D)	-	-	-
Net energy required at State Periphery (E = C – D)	**1,684.48**	**1,716.30**	**1,749.08**
Energy Available			
Central Generating Stations including UI over/under drawl (F)	2,046.55	2,046.55	2,046.55
Renewable Power (G)	130.26	131.69	133.12
Energy available at State Periphery (H = F + G)	**2,176.80**	**2,178.24**	**2,179.67**
(Sale)/ Purchase in Open Market (I = E - H)	(492.33)	(461.93)	(430.59)
Net energy available at State Periphery (J = H + I)	**1,684.48**	**1,716.30**	**1,749.08**

5.6.6. Renewable Purchase Obligation and Hydro Purchase Obligation

Petitioner's Submission:

The Petitioner has submitted it envisages to meet its RPO obligation through purchase of physical renewable power and may even exceed the RPO obligations as cheap power is available in the market, in comparison to the conventional sources. Further, for the upcoming Control Period, since the Commission has not yet approved any trajectory, EWEDC has assumed a 1% increase in Solar and Non-Solar RPO every year and has accordingly considered the projections for RPO fulfilment. Further, after considering all the proposed tied-up renewable energy, EWEDC proposes to meet any shortfall to fulfil the RPO obligation, through purchase from short-term (Traders) through DEEP portal and GTAM. For projection of EWEDC does not plan to buy any REC during the upcoming MYT Control Period. Accordingly, the Petitioner has submitted its RPO plan for FY 2021-22 and the upcoming Control Period as follows:

Table 65: RPO plan submitted by the Petitioner for the 3rd MYT Control Period (MU)

Sl. No.	Description	Unit	Revised Projections	Projections		
			FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
1	Sales Within State	MUs	1,440.02	1,595.55	1,643.08	1,692.58
2	RPO Obligation	%				
	- Solar	%	8.00%	9.00%	10.00%	11.00%
	- Non Solar	%	9.00%	10.00%	11.00%	12.00%
3	RPO Obligation	**MUs**				
	- Solar	MUs	23.71	40.37	49.28	59.29
	- Non Solar	MUs	26.67	44.86	54.21	64.68
4	Power Purchase	**MUs**				
	- Solar	MUs	7.68	9.59	11.03	12.46
	- Non Solar	Mus	120.66	120.66	120.66	120.66

Commission's analysis:

The Commission has approved the Renewable Purchase Obligation (RPO) and Hydro Purchase Obligation (HPO) for the 3rd MYT Control Period considering the JERC (Procurement of Renewable Energy), (Fourth Amendment) Regulations, 2022 notified on 24th March 2022 wherein the revised RPO targets and the HPO targets for the 3rd Control Period were approved and are as follows:

Year	Minimum quantum of Renewable purchase obligation (RPO) of renewable energy (in kWh)				
	Solar RPO	Non-Solar RPO			Total RPO
		HPO	Other Non-Solar	Total Non-Solar	
FY 2022-23	9.00%	0.35%	9.00%	9.35%	18.35%
FY 2023-24	10.00%	0.66%	9.25%	9.91%	19.91%
FY 2024-25	11.00%	1.08%	9.50%	10.58%	21.58%
FY 2025-26	12.00%	1.48%	9.75%	11.23%	23.23%
FY 2025-26	13.00%	1.80%	10.20%	12.00%	25.00%

The Petitioner has submitted that Table No. 1 for Quantum of Renewable Purchase Obligation (RPO) of JERC's Procurement of Renewable Energy (Third Amendment) Regulations, 2016 dated 22nd August, 2016 specifies that the RPO Target shall be computed excluding hydro power and the same was being followed by the Commission in its previous tariff orders of EWEDC.

Subsequently, Ministry of Power vide its Order No. 23/03/2016-R&R dated 29th January, 2021 with regards to Hydro Power Obligation (HPO) and RPO stated as follows:

"...
4. On 8th March 2019, the Government had issued an order detailing various measures to promote hydropower sector in India inter-alia declaring large hydropower projects including pumped storage projects having capacity of more than 25 MW (LHPs) which come into commercial operation after 8.3.2019 as renewable energy source and to specify Hydro Power Purchase Obligation (HPO) within Non-Solar Renewable Purchase Obligations (RPO).
....
7. RPO shall be calculated in energy terms as a percentage of total consumption of electricity excluding consumption met from hydro sources (LHPs)."

Accordingly, the Commission notified the JERC (Procurement of Renewable Energy), (Fourth Amendment) Regulations, 2022 as follows:

"(3.2) RPO to be calculated in energy terms as a percentage of total consumption of electricity excluding consumption met from hydro sources (LHPs)."

Wherein the definition of Hydro Purchase Obligation and Large Hydro Projects as given by the Commission in JERC (Procurement of Renewable Energy), (Fourth Amendment) Regulations, 2022 is as follows:

"2...

"(j) Hydro Purchase Obligation (HPO)" means obligation to procure power from large hydropower projects commissioned on and after 08.03.2019 and upto 31.03.2030

....

(m) Large Hydro Projects (LHP) means hydel power station including pumped storage project with an installed capacity above 25 MW, which came into commercial operation after 08.03.2019 and upto 31.03.2030."

The Petitioner has further submitted that conjoint reading of JERC's Procurement of Renewable Energy (Fourth Amendment) Regulations, 2022 (Definition of LHP - Reg 2(m)) dated 24th March, 2022 along with JERC's Procurement of Renewable Energy (Third Amendment) Regulations, 2016 dated 22nd August, 2016 creates confusion with regard to methodology towards exclusion of Hydro Power while calculating RPO Targets. The above interpretation results in exclusion of all LHPs from which EWEDC presently procures hydro power, as it has no arrangement with any hydel power station including pumped storage project with an installed capacity above 25 MW, which came into commercial operation after 08.03.2019. The Petitioner has further submitted that the above definition as per MoP's order is for the limited purpose for calculation for HPO and not for excluding hydro power while computing RPO. Majority of power procured by EWEDC is from large hydro plants and exclusion of all of them shall substantially increase the RPO obligations and unnecessarily burden the consumers.

The Petitioner has requested the Commission to continue with the earlier practice of calculating RPO i.e. total consumption of electricity excluding the consumption met from LHPs wherein LHPs means the total consumption from all Large Hydro Projects above 25 MW regardless of COD of the respective plants. The Petitioner has further submitted that it will not be appropriate to enter into fresh PPAs with the hydro projects with installed capacity of 25 MW or above with COD after 08.03.2019 and will unnecessarily burden the consumers by way of increase in tariff.

The Commission has considered the Petitioner's submission. The Commission intended to use the definition of LHPs as given in JERC (Procurement of Renewable Energy), (Fourth Amendment) Regulations, 2022 only for HPO computation. Further, the Commission clarifies that RPO shall be calculated after excluding the consumption met from Large Hydro Projects above 25 MW.

The cumulative backlog of solar and non-solar compliance up to FY 2020-21 has been considered as per the Commission's Order on the Suo Moto Petition No. 61/2012 dated 5th July 2021. The solar and non-solar compliance for FY 2021-22 is considered as per the RPO compliance approved in the APR of the Tariff Order. Accordingly, the RPO and HPO approved by the Commission for the 3rd MYT Control Period is as follows:

Table 66: Renewable Purchase Obligation (RPO) approved by the Commission for 3rd MYT Control Period

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Sales within State (MU) (A)	1536.24	1572.14	1609.16
Hydro Power available at Generator Periphery (MU) (B)	1,400.54	1,400.54	1,400.54
Transmission Loss (%) (C)	4.03%	4.03%	4.03%
Transmission Loss (MU) (D= B*C)	56.44	56.44	56.44
T&D Loss (%) (E)	8.80%	8.40%	8.00%
T&D Loss (MU) [F = E * (B-D)]	118.28	112.90	107.53
Hydro Power Consumed (G = B - D - F)	1225.82	1231.20	1236.57
Conventional Power Consumed (H = A - G)	**310.42**	**340.94**	**372.58**
RPO obligation (%)	**18.00%**	**19.25%**	**20.50%**
Solar (H)	9.00%	10.00%	11.00%
Non-Solar (I)	9.00%	9.25%	9.50%
RPO obligation for the year (MU)	**55.88**	**65.63**	**76.38**
Solar (G * H)	27.94	34.09	40.98
Non-Solar (G * I)	27.94	31.54	35.40
RPO Compliance from Physical Power (MU)	**131.37**	**132.81**	**134.25**
Solar	9.59	11.03	12.46
Non-Solar	121.78	121.78	121.79
Standalone RPO Compliance Backlog (MU)	**18.34**	**23.07**	**28.52**
Solar	18.34	23.07	28.52
Non-Solar	-	-	-
Cumulative RPO Compliance Backlog (MU)	**22.75**	**45.81**	**74.33**
Solar	22.75	45.81	74.33
Non-Solar	-	-	-

Table 67: Hydro Purchase Obligation (HPO) approved by the Commission for 3rd MYT Control Period

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Sales within State (MU) (A)	1536.24	1572.14	1609.16
HPO obligation (%)	0.35%	0.66%	1.08%
HPO obligation for the year (MU)	**5.38**	**10.38**	**17.38**

The Commission observes that all the Hydro Power procured by EWEDC is from large hydropower projects commissioned before 08.03.2019. **In order to fulfil the HPO, the Petitioner is directed to procure power from large hydropower projects commissioned on and after 08.03.2019 and upto 31.03.2030.**

5.7. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 61 of the JERC MYT Regulation, 2021 states the following:

"61.1 The Operation and Maintenance Expenses for the Retail Supply Business shall be computed in accordance with this Regulation.

61.2 O&M Expenses shall comprise of the following:

a) Employee expenses - salaries, wages, pension contribution and other employee costs;

b) Administrative and General expenses including insurance charges if any; and

c) Repairs and Maintenance expenses.

61.3 The Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the Distribution Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

61.4 O&M expenses for the nth Year of the Control Period shall be approved based on the formula given below:

O&Mn = (R&Mn + EMPn + A&Gn) x (1 - Xn) + Terminal Liabilities

Where,

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

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

A&Gn = (A&Gn-1) x (1+CPIinflation)

'K' is a constant (expressed in %). Value of K for each Year of the Control Period shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPIinflation – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3) Years before the base Year;

WPIinflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three (3) Years before the base Year;

EMPn – Employee expenses of the Distribution Licensee for the nth Year;

A&Gn – Administrative and General expenses of the Distribution Licensee for the nth Year;

R&Mn – Repair and Maintenance expenses of the Distribution Licensee for the nth Year;

GFAn-1 – Gross Fixed Asset of the Distribution Licensee for the n-1th Year;

Xn is an efficiency factor for nth Year. Value of Xn shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;

Gn is a growth factor for the nth Year. Value of Gn shall be determined by the Commission for each Year in the Multi Year Tariff Order for meeting the additional manpower requirement based on Licensee's filings, benchmarking, approved cost by the Commission in past and any other factor that the Commission feels appropriate:

Provided that in case the Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, the O&M Expenses shall be determined on a case to case basis.

61.5 Terminal liabilities of employees of Licensee including pension expenses etc. shall be approved as per actuals submitted by the Licensee, subject to prudence check or be established through actuarial studies. Additionally, any variation due to changes recommended by the pay commission shall be allowed separately by the Commission, subject to prudence check.

61.6 For the purpose of estimation, the same value of factors – CPIinflation and WPIinflation shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors – CPIinflation and WPIinflation during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation.

Provided that at the time of truing up, the variation in the normative and actual O&M expenses shall be dealt in accordance with Regulation 15."

5.7.1. Employee Expenses

Petitioner's Submission

The Petitioner has determined the employee expenses for each year of the Control Period based on the norms specified in the JERC MYT Regulations, 2021. The Petitioner has considered FY 2021-22 as the base year and the employee expenses for the Base Year FY 2021-22 have been estimated based on the actual data from FY 2017-18 to FY 2019-20 and provisional data for FY 2020-21 due to unavailability of audited accounts. The Petitioner has considered average of actual employee expenses for FY 2018-19 to FY 2020-21 as the median year's (FY 2019-20) employee expenses and then escalated the same twice with CPI value to obtain the employee expenses for the base year i.e. FY 2021-22 and is as shown below:

Table 68: Employee Expenses computation for Base Year (INR Cr)

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22 (Base Year)
1	Employee Expenses (Average FY 2019-21)	74.24		
2	CPI Inflation for preceding three years (CPI)		6.00%	6.00%
	Employee Expenses		**78.69**	**83.41**

Further, as per Regulation 52 of JERC MYT Regulation, 2021, Gn factor is a growth factor which will be approved by the Commission to meet the additional manpower requirement proposed in MYT tariff filing. EWEDC has submitted that it has computed Gn factor for MYT control period by considering the proposed employee addition and retirements. The Petitioner has projected the employee expenses for the control period in line with the MYT Regulations 2021 and is provided in the table below:

Table 69: Employee Expense as submitted by the Petitioner for 3rd MYT Control Period (INR Cr)

Particulars	Units	Base Year	MYT Control period		
		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Employee Cost for nth-1 year (A)	INR Cr	83.41			
Gn Factor (Y-O-Y) (B)	%		6.16%	0.00%	0.00%
CPI Inflation (C)	%		6.00%	6.00%	6.00%
Employee Cost for nth year D= A x (1+B) x (1+C)	INR Cr	**83.41**	**93.86**	**99.49**	**105.46**

Commission's analysis

In accordance with the JERC MYT Regulations, 2021, the Commission has determined the Employee expenses for each year of the MYT Control Period. The Regulation 6 of the JERC MYT Regulations, 2021 stipulates the following:

"6. Values for Base Year

6.1 The values for the Base Year of the Control Period shall be determined on the basis of the audited accounts or provisional accounts of last three (3) Years, and other factors considered relevant by the Commission:

Provided that, in absence of availability of audited accounts or provisional accounts of last three (3) Years, the Commission may benchmark the parameters with other similar utilities to establish the values for Base Year:

Provided further that the Commission may change the values for Base Year and consequently the trajectory of parameters for Control Period, considering the actual figures from audited accounts."

The Petitioner has failed to submit the audited accounts for FY 2020-21. In response to the Commission's query regarding submission of provisional accounts, the Petitioner vide its reply dated 4th May 2022 has submitted the provisional accounts for FY 2020-21. The Commission has considered the actual audited employee expenses from FY 2018-19 to FY 2019-20 and provisional account for FY 2020-21 to arrive at the Base Year estimates i.e. for the FY 2021-22. The average of these three years i.e. FY 2018-19 to FY 2020-21 has been considered as employee expenses for the FY 2019-20. This has been escalated with the average CPI Inflation of the last two years to arrive at the employee expenses for the Base Year i.e. FY 2021-22. The resultant employee expenses of the Base Year have been escalated by Growth Rate determined based on the manpower plan approved in the Business Plan Order, dated 11th July 2022 and the average CPI Inflation of the last three years to arrive upon the employee expenses of each year of the 3rd Control Period. The CPI inflation has been computed as follows:

Table 70: CPI inflation computed for 3rd Control Period

FY	Average of (April – March)	Increase in CPI Index	Average increase In CPI indices over 3 year
FY 2017-18	284.42		6.00%
FY 2018-19	299.92	5.45%	
FY 2019-20	322.50	7.53%	
FY 2020-21	338.68	5.02%	

Further, the Commission has considered the Growth factor as per the Manpower Plan approved in the Business Plan Order dated 11th July 2022.

Table 71: Growth factor considered by the Commission for 3rd MYT Control Period

Sl. No.	Particulars	Approved for 3rd MYT Control Period		
		FY 2022-23	FY 2023-24	FY 2024-25
1	Number of employees as on 1st April	**1,086**	**1,171**	**1,116**
2	Recruitment	151	0	0
3	Number of employees retired/ retiring during the year	66	55	56
4	Number of employees at the end of the year (1+2-3)	**1,171**	**1,116**	**1,060**
5	Gn (Growth factor)	7.83%	-4.70%	-5.02%

Accordingly, the employee expenses approved by the Commission in the MYT Control Period have been provided in the following table:

Table 72: Employee Expense approved by the Commission for 3rd MYT Control Period

Particular	Base Year	3rd MYT Control Period		
	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Gn (Growth factor as per the Manpower Plan approved in the Business Plan Order)		7.83%	-4.70%	-5.02%
CPI (3 previous year avg.) (in %)		6.00%	6.00%	6.00%
Employee Expenses (INR Cr)	**81.29**	**92.92**	**93.87**	**94.51**

The Commission approves Employee Expenses of INR 92.92 Cr. for the FY 2022-23, INR 93.87 Cr. for the FY 2023-24 and INR 94.51 Cr. for the FY 2024-25. However, as the base expenses have been computed on the basis of provisional annual accounts, the trajectory may be revised again for the 3rd MYT Control Period after the availability of audited annual accounts for FY 2021-22.

5.7.2. Administrative and General (A&G) Expenses

Petitioner's Submission

The Petitioner submitted that A&G expenses for each year of the 3rd MYT Control Period has been computed based on the norms specified in the JERC MYT Regulations, 2021 i.e., A&Gn = (A&Gn-1) x (1+CPI inflation). The Petitioner has considered FY 2021-22 as the base year and has been arrived by escalating the average (FY 2019-20) by CPI inflation. The working for the same is provided in the following tables:

Table 73: A&G Expenses computation for Base Year (INR Cr)

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22 (Base Year)
1	A&G Expenses (Average FY 2019-21)	6.34		
2	CPI Inflation for preceding three years (CPI)		6.00%	6.00%
	Employee Expenses	**6.34**	**6.72**	**7.13**

The following table provides the A&G expenses projected for each year of the 3rd MYT Control Period along with various parameters considered.

Table 74: A&G Expense as submitted by the Petitioner for 3rd MYT Control Period (INR Cr)

Particulars	Units	Base Year	MYT Control period		
		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
A&G Expenses (A)	INR Cr	7.13			
CPI Inflation (B)	%		6.00%	6.00%	6.00%
A&G Expenses C= A*(1+B)	INR Cr	**7.13**	**7.55**	**8.01**	**8.49**

Commission's analysis

The Petitioner has failed to submit the audited accounts for FY 2020-21. In response to the Commission's query regarding submission of provisional accounts, the Petitioner vide its reply dated 4th May 2022 has submitted the provisional accounts for FY 2020-21. The Commission has considered the actual audited employee expenses from FY 2018-19 to FY 2019-20 and provisional account for FY 2020-21 to arrive at the Base Year estimates i.e. for the FY 2021-22 as follows:

Particulars	As per Audited and Prov. A&G Exp.
FY 2018-19	6.44
FY 2019-20	5.42
FY 2020-21	5.00
Avg. A&G expenses	**5.62**

This is escalated with CPI of the respective years to arrive at the Base Year estimates as follows:

Table 75: Calculations of A&G Expenses for base year as approved by the Commission (INR Crore)

S. No.	Particulars	A&G Expenses			3-Year Average	CPI Inflation (%) 3-Year Average for FY 2020-21	CPI Inflation (%) 3-Year Average for FY 2021-22	FY 2021-22 (Base Year)
		FY 2018-19	FY 2019-20	FY 2020-21				
		(a)	(b)	(c)	(d) = [(a)+(b)+(c)]/3	(e)	(f)	(g)= d*(1+e)*(1+f)
1	A&G Expenses	6.44	5.42	5.00	**5.62**	5.35	6.00	**6.28**

Thereafter, the Base Year estimate has been escalated by the average CPI Inflation of the last three years to arrive at the A&G expenses for the Base Year i.e. FY 2021-22. The resultant A&G expenses of the Base Year has been escalated by the average CPI Inflation of the last three years to arrive upon the A&G expenses of each year of the 3rd Control Period. The A&G expenses approved by the Commission in the MYT Control Period have been provided in the following table:

Table 76: A&G Expense approved by the Commission for 3rd MYT Control Period

Particular	Base Year	ARR		
	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
CPI (3 previous year avg.) (in %)		6.00%	6.00%	6.00%
Total A&G Expenses	**6.28**	**6.65**	**7.05**	**7.48**

The Commission approves the Administrative & General (A&G) expenses of INR 6.65 Cr. for the FY 2022-23, INR 7.05 Cr. for the FY 2023-24 and INR 7.48 Cr. for the FY 2024-25. However, as the base expenses have been computed on the basis of provisional annual accounts, the trajectory may be considered again for the 3rd MYT Control Period after the availability of audited annual accounts for FY 2021-22, if required.

5.7.3. *Repair & Maintenance Expenses (R&M)*

Petitioner's Submission

The R&M expenses for each year of the Control Period has been projected based on the norms specified in the JERC MYT Regulations, 2021.

The Petitioner has also worked out average k-Factor based on Trued up GFA and actual R&M expenses incurred previous three years. The 'K' factor has been computed as follows:

Table 77: Calculation of 'K' as submitted by the Petitioner for 3rd MYT Control Period

S.No.	Particulars	FY 2018-19	FY 2019-20	FY 2020-21
1	Opening GFA (INR Cr)	437.38	452.31	457.77
2	R&M Expenses (INR Cr)	10.51	10.67	16.65
3	K factor	2.40%	2.36%	3.64%
4	Avg of K factor			**2.80%**

R&M Expenses have been calculated based on the formula and methodology provided in the Regulations, R&Mn = K x GFAn-1 x (1+WPI inflation).

Table 78: R&M Expense submitted by the Petitioner for 3rd MYT Control Period

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
GFAn-1	484.45	517.56	541.42
K-Factor	2.80%	2.80%	2.80%
WPI Inflation	2.42%	2.42%	2.42%
R&M Expenses	13.89	14.84	15.53

Commission's analysis

The 'K' factor has been determined as the ratio of R&M to opening GFA for the FY 2018-19, FY 2019-20 and FY 2020-21 (last three available audited and provisional accounts) and averaged for three years. The 'K' factor has been computed as follows:

Table 79: 'K' computation by the Commission for 3rd MYT Control Period

Particulars	FY 2018-19	FY 2019-20	FY 2020-21
R&M Expenses	13.06	13.63	16.65
Opening GFA (GFAn-1)	437.38	452.31	457.77
K Factor (%)	2.99%	3.01%	3.64%
K Factor Approved by the Commission (Average of 3 years) (%)			**3.21%**

The 'K' factor is kept constant for all the years and multiplied with the opening GFA approved for the (n-1)th year. The resultant amount is then escalated by WPI Inflation to arrive upon the R&M Expenses for each year of the Control Period. The WPI Inflation has been computed as follows:

Table 80: WPI inflation computed for 3rd MYT Control Period

FY	Average of (April – March)	Increase in WPI Index	Average increase In WPI indices over 3 year
FY 2017-18	114.88		2.42%
FY 2018-19	119.79	4.28%	
FY 2019-20	121.80	1.68%	
FY 2020-21	123.38	1.29%	

The R&M expenses approved by the Commission for each year of the 3rd MYT Control Period have been provided in the following table:

Table 81: R&M Expense approved by the Commission for the 3rd MYT Control Period (in INR Cr.)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA (GFAn-1)	471.52	545.16	624.82
K Factor (%)	3.21%	3.21%	3.21%
Avg. WPI Inflation (%)	2.42%	2.42%	2.42%
R&M Expenses = K x (GFA n-1) x (1+WPIinflation)	**15.51**	**17.94**	**20.56**

The Commission therefore approves the Repair & Maintenance (R&M) expenses of INR 15.51 Cr. for the FY 2022-23, INR 17.94 Cr. for the FY 2023-24 and INR 20.56 Cr. for the FY 2024-25. However, as the K factor has been computed on the basis of provisional annual accounts, the trajectory may be considered again for the 3rd MYT Control Period after the availability of audited annual accounts for FY 2020-21, if required.

5.7.4. Summary of O&M Expenses

Petitioner's Submission

The Summary of O&M expenses as per the Petitioner for each year of the 3rd MYT Control Period have been provided in the following table:

Table 82: Summary of O&M expenses submitted by the Petitioner for the 3rd MYT Control Period (in INR Cr.)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Total Employee Expenses	93.86	99.49	105.46
Total A&G expenses	7.55	8.01	8.49
Total R&M Expenses	13.89	14.84	15.53
Total O&M expenses	**115.31**	**122.34**	**129.48**

Commission's analysis:

The Summary of O&M expenses approved by the Commission for each year of the 3rd MYT Control Period have been provided in the following table:

Table 83: Summary of O&M expenses approved by the Commission for the 3rd MYT Control Period (in INR Cr.)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Total Employee Expenses	92.92	93.87	94.51
Total A&G expenses	6.65	7.05	7.48
Total R&M Expenses	15.51	17.94	20.56
Total O&M expenses	**115.08**	**118.85**	**122.54**

5.8. Gross Fixed Assets (GFA) and Capitalization

Petitioner's Submission

The Petitioner submitted that they have considered the capital expenditure for the control period as per their submission of capital expenditure plan in the Business Plan Petition. The details of the capital expenditure and capitalisation as proposed by the Petitioner for the 3rd Control Period is as under:

Table 84: Capital Expenditure submitted by the Petitioner for the 3rd MYT Control Period (INR Cr)

Sl. No.	Name of scheme	FY 2022-23	FY 2023-24	FY 2024-25
Existing Schemes				
1	33 KV and Above	9.38	0.05	-
2	11 KV and Below	14.47	3.74	1.90
	Total (Existing/Spillover Schemes)	**23.85**	**3.79**	**1.90**
New Schemes				
1	33 KV and Above	4.00	15.00	10.00
2	11 KV and Below	9.68	32.47	25.38
	Total (New Schemes)	**13.68**	**47.47**	**35.38**
	GRAND TOTAL (Existing and New Schemes)	**37.53**	**51.26**	**37.28**

Table 85: Capitalization submitted by the Petitioner for the 3rd MYT Control Period (INR Cr)

Sl. No.	Name of scheme	FY 2022-23	FY 2023-24	FY 2024-25
Existing Schemes				
1	33 KV and Above	18.66	46.99	-
2	11 KV and Below	31.04	23.47	4.41
	Total (Existing/Spillover Schemes)	**49.70**	**70.46**	**4.41**
New Schemes				
1	33 KV and Above	-	4.00	25.00
2	11 KV and Below	6.43	21.39	39.73
	Total (New Schemes)	**6.43**	**25.39**	**64.73**
	GRAND TOTAL (Existing and New Schemes)	**56.13**	**95.85**	**69.14**

Commission's analysis:

The Commission considered the Capital expenditure and capitalization as approved by the Commission in the Business Plan Order dated 11th July 2022. The following table provides the summary of capital expenditure and capitalization now approved by the Commission (a more detailed description of the capital expenditure plan is given in the Business Plan Order):

Table 86: Capital Expenditure & Capitalisation considered by the Commission for 3rd MYT Control Period (INR Cr.)

Particular	FY 2022-23	FY 2023-24	FY 2024-25
Total Capital Expenditure	37.13	50.94	37.26
Total Capitalisation	73.64	79.66	43.49

5.9. Capital Structure

Petitioner's Submission

The Petitioner has proposed the following funding plan for the capital expenditure proposed for the 3rd control period:

Table 87: Funding Plan as proposed by the Petitioner for the 3rd MYT Control period (INR Crore)

Sl. No.	Sources of Funds	FY 2022-23	FY 2023-24	FY 2024-25	Total
A	**Total Capital expenditure**	**37.53**	**51.26**	**37.28**	**126.08**
B	Grant	0.83	0.01	0.00	0.84
C	**Total Capital Expenditure (excluding Grant) (A-B)**	**36.70**	**51.25**	**37.28**	**125.24**
D	Debt (%)	70.00%	70.00%	70.00%	70.00%
E	Equity (%)	30.00%	30.00%	30.00%	30.00%
	Normative Debt (INR Cr) (C x D)	**25.69**	**35.88**	**26.10**	**87.66**
	Equity (INR Cr) (C x E)	**11.01**	**15.38**	**11.18**	**37.57**

The Petitioner has also provided the calculation of net GFA/Capitalisation after removal of grant portion, as depreciation, Interest on loan and return on equity is not allowed on the assets created through grants or any subsidy. The details are provided in the following table:

Table 88: Capital Structure submitted by the Petitioner for 3rd MYT Control Period (INR Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Total Capitalisation	56.13	95.85	69.14
2	Less: Grant	-	8.57	-
3	**Net Capitalisation excluding grant**	**56.13**	**87.28**	**69.14**
4	Debt (%)	70%	70%	70%
5	Equity (%)	30%	30%	30%
6	**Normative Loan**	**23.17**	**16.70**	**45.12**
7	**Normative Equity**	**9.93**	**7.16**	**19.34**

Commission's analysis

Regulation 27 of the JERC MYT Regulations, 2021 specifies the following:

"27.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2022 shall be considered:

Provided that in case of retirement or replacement or De-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or De-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

27.2 For New Projects, the debt-equity ratio as on the Date of Commercial Operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 24, after prudence check for determination of tariff:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of tariff:

Provided also that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan for the Licensee for determination of tariff:

Provided also that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Provided further that the premium, if any, raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the scheme,

shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the transmission system or the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

27.3 Any expenditure incurred or projected to be incurred on or after April 1, 2022, as may be admitted by the Commission, as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in these Regulations"

The Commission has considered the Capital structure as approved in the Business Plan order, dated 31st March 2022 for 3rd MYT Control Period:

Table 89: Capital Structure considered by the Commission (INR Cr.)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Total Capitalisation	73.64	79.66	43.49
2	Less: Grant	0.00	8.57	0.00
3	**Net Capitalisation excluding grant**	**73.64**	**71.09**	**43.49**
4	Debt (%)	70%	70%	70%
5	Equity (%)	30%	30%	30%
6	**Normative Loan**	**51.55**	**49.76**	**30.44**
7	**Normative Equity**	**22.10**	**21.33**	**13.05**

5.10. Depreciation

Petitioner's Submission

The closing GFA of the FY 2021-22 as approved in the APR has been considered as opening GFA of the FY 2022-23. Further, depreciation for each year has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year.

Based on the methodology given in MYT Regulations, 2021, depreciation for the 3rd MYT Control Period is submitted as under:

Table 90: Depreciation submitted by the Petitioner for the 3rd MYT Control Period (INR Cr)

No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Gross Fixed Assets (excluding Grants/ consumers Contribution and 90% depreciated assets, etc.)	336.68	368.99	395.19
2	Add: Addition During the Year	33.11	23.86	64.45
3	Less: Decapitalisation	0.00	0.00	0.00
4	Closing Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)	369.78	393.64	458.09

No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
5	Average Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)	353.23	381.71	425.87
6	Weighted Average Rate of Depreciation (%)	3.47%	3.48%	3.49%
7	**Depreciation for the year**	**12.24**	**13.27**	**14.86**

Commission's analysis

Regulation 31 of the JERC MYT Regulations, 2021 stipulates the following:

"31.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided also that the no depreciation shall be allowed on the assets financed through consumer contribution, deposit work, capital subsidy or grant.

31.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

Provided further that the salvage value of Information Technology equipment and computer software shall be considered at zero (0) per cent of the allowable capital cost.

31.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets.

31.4 In case of existing assets, the balance depreciable value as on April 1, 2022, shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to March 31, 2021, from the gross depreciable value of the assets.

31.5 The depreciation shall be chargeable from the first Year of commercial operations. In case of projected commercial operation of the assets during the Year, depreciation shall be computed based on the average of opening and closing value of assets:

Provided that depreciation shall be re-calculated during truing-up for assets capitalised at the time of truing up of each Year of the Control Period, based on documentary evidence of asset capitalised by the Applicant, subject to the prudence check of the Commission.

31.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

31.7 The depreciation for a Distribution Licensee shall be calculated annually, based on the Straight Line Method, over the Useful Life of the asset at rates specified in Appendix I of these Regulations.

31.8 In addition to allowable depreciation, the Distribution Licensee shall be entitled to advance against depreciation (AAD), computed in the manner given hereunder:

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure,

subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations:

Provided that advance against depreciation shall be permitted only if the cumulative repayment upto a particular Year exceeds the cumulative depreciation upto that Year:

Provided further that advance against depreciation in a Year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation upto that Year.

31.9 The Distribution Licensee shall provide the list of assets added during each Year of Control Period and list of assets completing 90% of depreciation in the Year along with Petition for annual performance review, true-

up and tariff determination for ensuing Year.

31.10 The remaining depreciable value for a Distribution Licensee shall be spread over the balance useful life of the asset, on repayment of the entire loan."

The Commission has derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in JERC MYT Regulations, 2021, provided in the following table:

Table 91: Asset-wise depreciation rate considered by the Commission for weighted average rate for 3rd MYT Control Period (%)

Description of Assets	Rate of Depreciation
Land & Land Rights	0.00%
Buildings	1.80%
Plant & Machinery	3.60%
Transformer	3.60%
Lines & Cables (HT & LT)	3.60%
Vehicles	18.00%
Furniture & Fixtures	6.00%
Office Equipment	6.00%
IT Equipment	15.00%
Testing & Measuring Equipment	6.00%
SCADA P&M	6.00%

The closing GFA of the FY 2021-22 as approved in the APR has been considered as opening GFA of the FY 2022-23. As discussed in the preceding section, GFA addition through Govt. Grants have been excluded for the computation of Depreciation. Further, depreciation for each year has been computed on average Gross Fixed Assets (GFA) after considering the net addition approved during each year. The GFA of assets that have completed 90% depreciation but still included in the GFA have not been excluded for the computation of Depreciation due to unavailability of requisite data. Accordingly, the Commission shall consider the same during the True-up of the respective years.

The following table provides the calculation of depreciation during the 3rd MYT Control Period.

Table 92: Depreciation considered by the Commission for 3rd MYT Control Period (INR Cr.)

Particular	FY 2022-23	FY 2023-24	FY 2024-25
Opening Gross Fixed Assets	346.49	420.13	491.22
Addition During the FY	73.64	71.09	43.49
Adjustment/Retirement during the FY	0.00	0.00	0.00
Closing Gross Fixed Assets	420.13	491.22	534.71
Average Gross Fixed Assets	383.31	455.67	512.96
Weighted Avg. rate of Depreciation (%)	3.45%	3.45%	3.45%
Depreciation	**13.24**	**15.73**	**17.71**

The Commission approves a depreciation of INR 13.24 Cr. for the FY 2022-23, INR 15.73 Cr. for the FY 2023-24 and INR 17.71 Cr. for the FY 2024-25.

5.11. Interest on Loan

Petitioner's Submission

Petitioner has submitted that EWEDC doesn't have any outstanding loan in their books. Hence, normative loan has been calculated in line with JERC MYT regulations, 2021. Rate of Interest for the purpose of interest computation during the Control Period has been considered as one (1) Year State Bank of India (SBI) MCLR rate prevailing as on 1st April 2021 plus 100 basis points, which works out to be 8.00%. Accordingly, taking into account the normative debt addition due to asset addition in each year of the Control Period, the Interest on Loan during the Control Period has been worked out. Further, the normative repayment has been considered equivalent to the depreciation projected for the particular year

The following table provides the normative Interest on Loan projected for the 3rd MYT Control Period based on JERC MYT regulations, 2021 as under.

Table 93: Interest on Normative Loan submitted by the Petitioner for the 3rd MYT Control Period (INR Cr)

Sr. No.	Particulars	Projection		
		FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Normative Loan	-	10.93	14.37
2	Add: Normative Loan during the Year/GFA during the year	23.17	16.70	45.12
3	Less: Normative Repayment	12.24	13.27	14.86
4	**Closing Normative Loan**	10.93	14.37	44.63
4	Average Normative Loan	5.47	12.65	29.50
5	Rate of Interest (@SBI 1 Year MCLR rate+100 Basis Points)	8.00%	8.00%	8.00%
6	**Interest on Normative Loan**	**0.44**	**1.01**	**2.36**

Commission's analysis:

Regulation 29 of the JERC MYT Regulation, 2021 states the following:

"29.1 The loans arrived at in the manner indicated in Regulation 27 on the assets put to use, shall be considered as gross normative loan for calculation of interest on the loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided further that in case of De-capitalisation or retirement or replacement of assets, the loan capital shall be reduced to the extent of outstanding loan component of the original cost of the decapitalized or retired or replaced assets, based on documentary evidence.

29.2 The normative loan outstanding as on April 1, 2022, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2021, from the gross normative loan.

29.3 Notwithstanding any moratorium period availed by the Transmission Licensee or the Distribution Licensee, as the case may be, the repayment of loan shall be considered from the first Year of commercial operation of the project and shall be equal to the annual depreciation allowed in accordance with Regulation 31.

29.4 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Transmission Licensee or the Distribution Licensee:

Provided that 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 Transmission Licensee or the Distribution Licensee shall be considered as the rate of interest after prudence check:

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered:

Provided further that if the Transmission Licensee or the Distribution Licensee does not have actual loan, then one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.

29.5 The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest:

Provided that at the time of truing up, the normative average loan of the Year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the Year.

29.6 For new loans proposed for each Financial Year of the Control Period, interest rate shall be considered as lower of (i) one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points, and (ii) weighted average rate of interest proposed by the Distribution Licensee.

29.7 The above interest computation shall exclude the interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, deposit work, capital subsidy or grant, carried out by Transmission Licensee or Distribution Licensee.

29.8 The finance charges incurred for obtaining loans from financial institutions for any Year shall be allowed by the Commission at the time of Truing-up, subject to prudence check.

29.9 The excess interest during construction on account of time and/or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Transmission or Distribution Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

29.10 The Transmission Licensee or the Distribution Licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the equally between the beneficiaries; i.e., the Transmission Licensee and the Distribution Licensee or the Distribution Licensee and the Consumers of Distribution Licensee."

As the Petitioner only has normative loan and no actual loan i.e., no fixed assets in operation which are funded through loans, the Commission has considered the SBI 1 Year MCLR rate as on 1st April 2021, plus 100 basis points as Rate of Interest, in accordance with the JERC MYT Regulations, 2021.

The Interest on Loan has been calculated on the average loan during the year with the closing loan of the FY 2021-22 as approved in the APR considered as opening loan of the FY 2022- 23. Further, the normative loan addition during each year of the control period has been considered as per the capital structure approved in section 5.9 of this Order.

Repayment of the loan has been considered equivalent to the depreciation for the respective years as determined by the Commission in line with the JERC MYT Regulations, 2021.

The following table provides the Interest on Loan approved by the Commission for the 3rd Control Period.

Table 94: Interest on Loan considered by the Commission for 3rd MYT Control Period (INR Cr.)

Particular	FY 2022-23	FY 2023-24	FY 2024-25
Opening Normative Loan	0.00	38.31	72.34
Add: Normative Loan During the year	51.55	49.76	30.44
Less: Normative Repayment= Depreciation	13.24	15.73	17.71
Closing Normative Loan	38.31	72.34	85.07
Average Normative Loan	19.16	55.33	78.71
Rate of Interest (%)	8.00%	8.00%	8.00%
Interest on Loan	**1.53**	**4.43**	**6.30**

The Commission approves Interest on Loan as INR 1.53 Cr. for the FY 2022-23, INR 4.43 Cr. for the FY 2023-24 and INR 6.30 Cr. for the FY 2024-25.

5.12. Return on Equity (RoE)

Petitioner's Submission

The Petitioner has segregated the proposed average equity (average of opening and closing equity) into average equity for Distribution Wires Business and Retail Supply Business based on the Allocation Statement provided in the JERC MYT Regulations, 2021 i.e., 90% allocation for the Distribution Wires Business and 10% allocation for the Retail Supply Business. Further, the opening equity for FY 2022-23 is taken as per closing normative equity for FY 2021-22.

In accordance with the Regulation 28.2 of the JERC MYT Regulations 2021, the Petitioner has considered a post-tax rate of 15.50% for the Distribution Wires Business (as per the prevalent CERC Regulations).

Further, in accordance with the Regulation 28.3 of the JERC MYT Regulations, 2021, the Petitioner has considered return on equity at the rate of 16% for the Retail Supply Business.

Table 95: Return on Equity submitted by the Petitioner for the 3rd MYT Control Period (INR Cr)

S. No	Particulars	Projection		
		FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Balance of Equity	139.39	149.32	156.47
2	Equity Addition during year (30% of Capitalization)	9.93	7.16	19.34
3	Closing Balance of Equity	149.32	156.47	175.81
4	Average Equity Amount	144.35	152.90	166.14
5	Average Equity-Wires Business (90%)	129.92	137.61	149.53
6	Average Equity -Retail Supply Business (10%)	14.44	15.29	16.61
7	Return on Equity for Wires Business (%)	15.50%	15.50%	15.50%
8	Return on Equity for Retail Supply Business (%)	16.00%	16.00%	16.00%
9	**Return on Equity for Wires Business**	**20.14**	**21.33**	**23.18**
10	**Return on Equity for Retail Supply Business**	**2.31**	**2.45**	**2.66**
11	**Total Return on Equity**	**22.45**	**23.78**	**25.84**

Commission's analysis:

Regulation 28 of the JERC MYT Regulation, 2021 states the following:

"28.1 Return on equity shall be computed on the paid up equity capital determined in accordance with Regulation 27 for the assets put to use for the Transmission Licensee and shall be allowed in accordance with the prevalent CERC Tariff Regulations for transmission system.

28.2 The return on equity for the Distribution Wires Business shall be allowed on the equity capital determined in accordance with Regulation 27 for the assets put to use at post-tax rate of return on equity specified in the prevalent CERC Tariff Regulations for transmission system.

28.3 The return on equity for the Retail Supply Business shall be allowed on the equity capital determined in accordance with Regulation 27 for the assets put to use, at the rate of sixteen (16) per cent per annum.

28.4 The return on equity shall be computed on average of equity capital at the beginning and end of Year."

The closing equity of the FY 2021-22 as approved in the APR is considered as opening equity of the FY 2022- 23. The Commission has segregated the approved average equity (average of opening and closing equity) into average equity for Distribution Wires Business and Retail Supply Business based on the Allocation Statement provided in the JERC MYT Regulations, 2021 i.e., 90% allocation for the Distribution Wires Business and 10% allocation for the Retail Supply Business.

The Commission has considered a post-tax rate of 15.50% for the Distribution Wires Business and a post-tax rate of 16% for the Retail Supply Business. The equity component has been determined in accordance with the capital structure as discussed in section 5.9 of this Order. The rate of return on equity for the Distribution Wires Business shall be trued up based on the prevalent Regulations during the True-up of the respective years. The following table provides the total return on equity approved for the 3rd MYT Control Period.

Table 96: Return on Equity considered by the Commission for 3rd MYT Control Period (INR Cr.)

S. No	Particular	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Equity Amount	135.51	157.61	178.94
2	Equity Addition during year	22.10	21.33	13.05
3	Closing Equity Amount	157.61	178.94	191.99
4	Average Equity Amount	146.56	168.27	185.46
5	Average Equity (Wires Business)	131.90	151.44	166.91
6	Average Equity (Retail Supply Business)	14.66	16.83	18.55
7	Return on Equity for Wires Business (%)	15.50%	15.50%	15.50%
8	Return on Equity for Retail Supply Business (%)	16.00%	16.00%	16.00%
9	**Return on Equity for Wires Business**	**20.44**	**23.47**	**25.87**
10	**Return on Equity for Retail Supply Business**	**2.34**	**2.69**	**2.97**
11	**Total Return on Equity**	**22.79**	**26.17**	**28.84**

The Commission approves Return on Equity of INR 22.79 Cr. for the FY 2022-23, INR 26.17 Cr. for the FY 2023-24 and INR 28.84 Cr. for the FY 2024-25.

5.13. Interest on Security Deposits

Petitioner's Submission

The opening security deposit is considered from the closing balance of deposit arrived for FY 2021-22. Addition of consumer security deposit projected as per new consumer expected to connect during 3rd MYT control period. The interest rate considered is 4.25% based on the RBI Bank rate applicable on the 1st April of the financial year in which tariff Petition is being filed.

Table 97: Interest on Security Deposit submitted by the Petitioner for the 3rd MYT Control Period (INR Cr)

No.	Particulars	Projections		
		FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Security Deposit	193.76	197.51	201.35
2	Add: Deposits during the Year	3.75	3.84	3.93
3	Less: Deposits refunded	0.00	0.00	0.00

No.	Particulars	Projections		
		FY 2022-23	FY 2023-24	FY 2024-25
4	**Closing Security Deposit**	197.51	201.35	205.28
5	**Average Security Deposit**	195.63	199.43	203.32
6	**Rate of Interest (%)**	**4.25%**	**4.25%**	**4.25%**
7	**Interest on Security Deposit**	**8.31**	**8.48**	**8.64**

Commission's analysis:

Regulation 29 of the JERC MYT Regulation, 2021 states the following:

"29.11 Interest shall be allowed on the amount held as security deposit held in cash from Retail Consumers at the Bank Rate as on 1st April of the Financial Year in which the Petition is filed:

Provided that at the time of truing-up, the interest on the amount of security deposit for the Year shall be considered on the basis of the actual interest paid by the Licensee during the Year, subject to prudence check by the Commission."

The Interest on security deposits has been calculated in accordance with the JERC MYT Regulations 2021, based on the average of the opening and closing consumer security deposits during the year. The closing Security Deposit of the FY 2021-22 as approved in the APR is considered as opening Security Deposit of the FY 2022- 23. The rate of interest has been considered equivalent to the prevailing RBI Bank rate. Net additions during the year have been considered for each year of the Control Period based on that considered by the Petitioner.

The following table provides the calculation of interest on consumer security deposits approved for each year of the MYT Control Period:

Table 98: Interest on Consumer security considered by the Commission for 3rd MYT Control Period (INR Cr.)

Particular	FY 2022-23	FY 2023-24	FY 2024-25
Opening Security Deposit	207.38	211.13	214.97
Add: Deposits During the year	3.75	3.84	3.93
Less: Deposits refunded	0.00	0.00	0.00
Closing Security Deposit	211.13	214.97	218.90
Average Security Deposit	209.26	213.05	216.94
RBI Bank Rate (%)	4.25%	4.25%	4.25%
Interest on Security Deposit on normative basis	**8.89**	**9.05**	**9.22**

The Commission approves Interest on Security Deposit as INR 8.89 Cr. for the FY 2022-23, INR 9.05 Cr. for the FY 2023-24 and INR. 9.22 Cr. for the FY 2024-25.

5.14. Interest on Working Capital

Petitioner's Submission

The interest on working capital has been calculated based on the normative principles outlined in the MYT Regulations, 2021.

The working capital requirement for the Control Period has been computed considering the following

- Receivable of two months of billing
- O&M Expenses of one month
- Maintenance Spares at 40% of repair and maintenance expenses for one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

The interest on working capital considered is the MCLR plus 200 basis points for SBI on 1st April 2021 plus 200 basis points i.e., 9.00% has been considered for computation of interest on working capital. The following table provides the Interest on working Capital proposed for 3rd MYT Control Period.

Table 99: Interest on Working Capital submitted by the Petitioner for the 3rd MYT Control Period (In INR Cr)

Sr. No.	Particulars	Projections		
		FY 2022-23	FY 2023-24	FY 2024-25
1	O&M Expenses for 1 month	9.61	10.20	10.79
2	Maintenance Spares (@ 40% of R&M Expenses for one (1) month)	0.46	0.49	0.52
3	Receivables equivalent to two (2) months	139.22	143.22	147.38
4	Less: Amount, if any, held as security deposits	197.51	201.35	205.28
5	**Total Working Capital**	**(48.22)**	**(47.44)**	**(46.59)**
6	Rate of Interest	9.00%	9.00%	9.00%
7	**Interest on Working Capital**	**0.00**	**0.00**	**0.00**

Commission's analysis:

Regulation 64 of the JERC MYT Regulation, 2021 states the following:

"64.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Retail Supply Business for the Financial Year, computed as follows:

a) O&M Expenses for one (1) month; plus

b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus

c) Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff;

Less

d) Power Purchase cost for one (1) month; plus

e) Amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from Consumers except the security deposits held in the form of Bank Guarantees:

Provided that at the time of truing up for any Year, the working capital requirement shall be recalculated on the basis of the values of components of working capital approved by the Commission in the truing up."

The Commission has computed the Interest on Working Capital for each year of the Control Period in accordance with the JERC MYT Regulations, 2021. The interest rate has been considered as 9.00% (1 year MCLR as on 1st April 2021 i.e., 7.00% + 200 basis points). The computation of interest on working capital is shown in the following table:

The following table provides the Interest on working Capital considered for each year of the 3rd MYT Control Period.

Table 100: Interest on working capital considered by the Commission for 3rd MYT Control Period (INR Cr.)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
O&M Expense for 1 month	9.59	9.90	10.21
Maintenance spares at 40% of R&M expenses for one (1) month;	0.52	0.60	0.69
Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff	132.56	140.51	148.72
Less: Amount held as security deposits	209.26	213.05	216.94
Less: Power Purchase cost for one (1) month	54.16	57.21	60.45
Net Working Capital	**(120.75)**	**(119.24)**	**(117.77)**
Rate of Interest (%)	9.00%	9.00%	9.00%
Interest on Working Capital	**0.00**	**0.00**	**0.00**

5.15. Income Tax

Petitioner's Submission

The Petitioner has not made any submission in this regard.

Commission's analysis:

Regulation 33 of JERC MYT Regulations, 2021 stipulates the following:

"33. Tax on Income

33.1 The treatment of tax on income for a Transmission Licensee shall be in accordance with the prevalent CERC Tariff Regulations.

33.2 The Commission in its MYT Order shall provisionally approve Income Tax payable for each Year of the Control Period, if any, based on the actual income tax paid, including cess and surcharge on the same, if any, as per latest audited accounts available for the Distribution Licensee, subject to prudence check.

33.3 Variation between Income Tax actually paid, including cess and surcharge on the same, if any, and approved, if any, on the income stream of the Licensed business of the Distribution Licensees shall be reimbursed to/recovered from the Distribution Licensees, based on the documentary evidence submitted at the time of truing up of each Year of the Control Period, subject to prudence check.

33.4 Under-recovery or over-recovery of any amount from the Consumers on account of such tax having been passed on to them shall be adjusted every Year on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors. The Distribution Licensee may include this variation in its truing up Petition:

Provided that tax on any income stream other than the core business shall not be a pass-through component in tariff and tax on such other income shall be borne by the Distribution Licensee."

Since the Petitioner has paid no Income tax in the previous years, no income tax liability is computed for the 3rd MYT Control Period and the same shall be Trued-up based on the actual income tax paid by the Petitioner.

5.16. Provision for Bad & Doubtful Debts

Petitioner's Submission

The Petitioner has not proposed any provision for bad and doubtful debts during the MYT Control Period.

Commission's analysis

Regulation 63 of the JERC MYT Regulation, 2021 states the following:

"63.1 The Commission may allow bad debts written off as a pass through in the Aggregate Revenue Requirement, based on the trend of bad debts written off in the previous years, subject to prudence check:

Provided that the Commission shall true up the bad debts written off in the Aggregate Revenue Requirement, based on the actual write off of bad debts excluding delayed payment charges waived off, if any, during the year, subject to prudence check:

Provided also that the provision for bad and doubtful debts shall be limited to 1% of the annual Revenue Requirement of the Distribution Licensee:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realized from such bad debt, the same shall be included as an uncontrollable item under the Non-Tariff Income of the year in which such revenue is realised."

The Commission also has not considered any Provision for Bad & Doubtful Debts for the 3rd MYT Control Period. The same shall be accounted for as per actuals during the True-up of respective years.

5.17. Non-Tariff Income (NTI)

Petitioner's Submission

The NTI proposed for each year of the 3rd MYT Control Period has been shown in the following table:

Table 101: Non-Tariff Income claimed by the Petitioner for the 3rd MYT Control Period (INR Cr)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Total Non-tariff income	17.66	17.66	17.66

Commission's analysis:

Regulation 65 of the JERC MYT Regulations, 2021 stipulates the following:

"65. Non-Tariff Income

65.1 The amount of Non-Tariff Income relating to the retail supply of electricity as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in calculating the tariff for retail supply of electricity by the Distribution Licensee:

Provided that the Distribution Licensee shall submit full details of its forecast of Non-Tariff Income to the Commission along with its application for determination of tariff.

65.2 The Non-Tariff Income shall inter-alia include:
(a) Income from rent of land or buildings;

(b) Income from sale of scrap;
(c) Income from statutory investments;
(d) Interest on advances to suppliers/contractors;
(e) Rental from staff quarters;
(f) Rental from contractors;
(g) Income from hire charges from contactors and others;
(h) Income from advertisements, etc.;
(i) Meter/metering equipment/service line rentals;
(j) Service charges;
(k) Consumer charges;
(l) Recovery for theft and pilferage of energy;
(m) Rebate availed on account of timely payment of bills;
(n) Miscellaneous receipts;
(o) Deferred Income from grant, subsidy, etc., as per Annual Accounts;
(p) Prior period income, etc.:

Provided that the interest/dividend earned from investments made out of Return on Equity corresponding to the Retail Supply Business of the Distribution Licensee shall not be included in Non-Tariff Income:

Provided further that any income earned by a Distribution Licensee by sale of power to other Distribution Licensees or to Consumers as per Section 49 of the Act using the existing power purchase agreements or bulk supply capacity allocated to the Distribution Licensee's Area of Supply shall be reduced from the Aggregate Revenue Requirement of the Distribution Licensee for the purpose of determination of tariff. Such reduction shall be carried out in accordance with Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017, as amended from time to time."

The Commission considers the same NTI as approved by the Commission in the True up of FY 2019-20. The same shall be Trued-up on actual basis. The NTI approved for each year of the 3rd MYT Control Period has been shown in the following table:

Table 102: Non-Tariff Income considered by the Commission for 3rd MYT Control Period (INR Cr.)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Non-Tariff Income	**17.66**	**17.66**	**17.66**

5.18. Aggregate Revenue Requirement (ARR)

Petitioner's Submission

Based on the expenses as detailed above, the Petitioner submitted the net aggregate revenue requirement for each year of the 3rd MYT Control Period as shown in the following table:

Table 103: ARR submitted by the Petitioner for 3rd MYT Control Period (INR Cr.)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Power Purchase Cost	749.68	791.25	834.23
2	Operation & Maintenance Expenses	115.30	122.34	129.48
3	Depreciation	12.24	13.27	14.86

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
4	Interest and Finance charges	0.44	1.01	2.36
5	Interest on Working Capital	-	-	-
6	Interest on Security Deposit	8.31	8.48	8.64
7	Return on Equity	22.45	23.78	25.84
8	**Total Revenue Requirement**	**908.43**	**960.12**	**1015.40**
9	Less: Non-Tariff Income	17.66	17.66	17.66
10	**Net Revenue Requirement**	**890.77**	**942.46**	**997.74**

Commission's Analysis

On the basis of the detailed analysis of the cost parameters of the ARR the net revenue requirement for each year of the MYT Control Period is approved as provided in the following table:

Table 104: ARR approved by the Commission for the 3rd MYT Control Period (INR Cr.)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed by the Petitioner	Approved in ARR	Claimed by the Petitioner	Approved in ARR	Claimed by the Petitioner	Approved in ARR
Power Purchase Cost	749.68	649.94	791.25	686.48	834	725.35
Operation & Maintenance Expenses	115.30	115.08	122.34	118.85	129.48	122.54
Depreciation	12.24	13.24	13.27	15.73	14.86	17.71
Interest and Finance charges	0.44	1.53	1.01	4.43	2.36	6.30
Interest on Working Capital	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Security Deposit	8.31	8.89	8.48	9.05	8.64	9.22
Return on Equity	22.45	22.79	23.78	26.17	25.84	28.84
Total Revenue Requirement	**908.43**	**811.47**	**960.12**	**860.72**	**1,015.40**	**909.96**
Less: Non-Tariff Income	17.66	17.66	17.66	17.66	17.66	17.66
Net Revenue Requirement	**890.77**	**793.81**	**942.46**	**843.06**	**997.74**	**892.30**

5.19. Revenue at existing Retail Tariff

Petitioner's Submission

The Revenue from sale of power at existing Tariff based on the projected sales, consumer and connected load for FY 2022-23 is tabulated below:

Table 105: Revenue at existing tariff submitted by the Petitioner for FY 2022-23 (INR Cr.)

Sr. No.	Category of Consumers	FY 2022-23 (Estimated)
A	Domestic – LT	328.74
B	Domestic – HT	13.03

C	Commercial – LT	139.29
D	Commercial – HT	154.09
E	Large Supply	72.01
F	Medium Supply	63.58
G	Small Power	8.84
H	Agriculture	0.37
I	Public Lighting	8.87
J	Bulk Supply	46.49
K	Others Temporary Supply	0.00
	Total	**835.29**

Commission's analysis

The category wise/ sub-category wise and slab-wise revenue at existing retail tariff is calculated as per the applicable tariff rates. The revenue from demand charges and the energy charges have been projected for each category/ sub-category and slab. The Commission has considered the energy sales, connected load and number of consumers approved by the Commission in the Business Plan Order dated 11th July 2022 for projecting the revenue at existing tariff. The Commission has considered suitable assumptions wherever necessary. The revenue at existing tariff as computed by the Commission for the FY 2022-23 has been shown in the following table:

Table 106: Revenue at existing tariff approved by the Commission for FY 2022-23 (INR Cr.)

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)
1	**DOMESTIC SUPPLY (DS)**	**798.15**	**11.12**	**347.03**	**358.15**	**4.49**
A	LT Domestic					
1	0-150 units	63.77	2.74	15.94	18.69	2.93
2	151-400 units	232.99	3.95	99.02	102.97	4.42
3	401 and above units	470.49	4.06	218.78	222.84	4.74
B	HT Domestic	30.91	0.37	13.29	13.66	4.42
2	**COMMERCIAL / NON RESIDENTIAL (NRS)**	**406.67**	**52.52**	**196.12**	**248.64**	**6.11**
A	LT Commercial					
1	0-150 units (Single Phase)	3.88	0.52	1.75	2.27	5.84
2	151-400 units (Single Phase)	11.29	0.25	5.31	5.55	4.92
3	401 and above units (Single Phase)	20.24	0.12	10.12	10.24	5.06
1	0-150 units (Three Phase)	0.31	0.05	0.14	0.18	5.98
2	151-400 units (Three Phase)	4.93	0.73	2.32	3.04	6.18
3	401 and above units (Three Phase)	148.63	21.95	74.32	96.27	6.48
B	HT Commercial	217.38	28.91	102.17	131.08	6.03
3	**INDUSTRY**	**233.38**	**32.33**	**101.75**	**134.07**	**5.74**
1	Large Industrial Power Supply (LS)	118.77	14.94	53.45	68.39	5.76
2	Medium Industrial Power Supply (MS)	98.26	16.50	41.27	57.76	5.88
3	Small Industrial Power Supply (SP)	16.35	0.89	7.03	7.92	4.84

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)
4	**AGRICULTURAL PUMPING SUPPLY(AR)**	**1.49**	**0.00**	**0.39**	**0.39**	**2.60**
1	Agricultural Pumping Supply	1.49	0.00	0.39	0.39	2.60
5	**PUBLIC LIGHTING (PL)**	**14.75**	**0.57**	**7.08**	**7.64**	**5.18**
6	**Bulk Supply (BS)**	**78.25**	**10.24**	**34.43**	**44.66**	**5.71**
1	Bulk Supply	78.25	10.24	34.43	44.66	5.71
7	**Temporary Supply**	**3.56**	**0.00**	**2.88**	**2.88**	**8.09**
1	Temporary Supply	3.56	0.00	2.88	2.88	8.09
8	**Electric Vehicle Charging Station**	-	-	-	-	-
1	Electric Vehicle Charging Station	-	-	-	-	-
	TOTAL	**1536.24**	**106.77**	**689.67**	**796.44**	**5.18**

The Commission has determined revenue from sale of power at existing tariff as INR 796.44 Cr. in the FY 2022-23.

5.20. Standalone Revenue Gap/ Surplus for FY 2022-23

Petitioner's Submission

Based on the ARR and the revenue from retail tariff projected by the Petitioner, the Petitioner has submitted a standalone revenue gap of INR 55.48 Cr for the FY 2022-23.

Commission's analysis

Based on the approved ARR and existing retail tariff, the following Revenue Gap/Surplus is arrived at for the FY 2021-22:

Table 107: Standalone Revenue Gap/ (Surplus) at existing tariff approved by Commission for FY 2022-23 (In INR Cr)

S. No	Particulars	Petitioners' Submission	Now Approved
1	Net Revenue Requirement	890.77	793.81
2	Revenue from Retail Sales at Existing Tariff	835.29	796.44
	Net Gap /(Surplus)	**55.48**	**(2.63)**

The standalone surplus at existing retail tariff is INR 2.63 Cr. for FY 2022-23. This estimated gap is considered while determining the retail tariff for FY 2022-23, as discussed in the subsequent Chapter.

6. Chapter 6: Tariff Principles and Design

6.1. Overall Approach

The Commission while designing retail tariffs for the FY 2022-23 has kept in view the principles of determination of tariff as set out in the Electricity Act, 2003 (EA 2003), Tariff Policy, 2016 and the JERC MYT Regulations, 2021.

The provision of supply of electricity to all the people is an essential driver for development, and also influences social and economic change. In this Tariff Order, the Commission has continued with its endeavor to meet the objectives of the EA 2003, as set out in its Preamble, including the protection of the interest of consumers, the supply of electricity to all areas and the rationalisation of tariffs. The EA, 2003 also mandates the Commission to strike a fine balance between the interests of various stakeholders including Utilities and consumers. The Commission has also taken into consideration the Petitioner's submissions as well as the public responses in these proceedings.

6.2. Applicable Regulations

Regulation 20 of the JERC MYT Regulations, 2021 states the following:

"***20. Annual determination of tariff***

20.1 The Commission shall determine the tariff of a Generating Company, Transmission Licensee and Distribution Licensee covered under a Multi Year Tariff framework for each Year during the Control Period, in accordance with timelines specified in Regulation 18, having regard to the following:

a) The approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges of the Generating Company, Transmission Licensee and Distribution Licensee for such Financial Year, including modifications approved at the time of Mid-term Review, if any; and

b) Approved gains and losses, including the incentive available, to be passed through in tariff, following the truing up of previous Year."

Further, Regulation 68 of the JERC MYT Regulations, 2021 states the following:

*"**68. Determination of Tariff***

68.1 The Commission may categorize Consumers on the basis of their 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 and any other factor as considered appropriate by the Commission.

68.2 The Commission shall endeavour to determine cost of supply for each category/ sub-category of Consumers.

68.3 The Commission shall endeavour to reduce gradually the cross-subsidy between Consumer categories with respect to the cost of supply in accordance with the provisions of the Act.

68.4 The tariff proposal by Licensee and the tariff determination by the Commission shall be based on the following principles:

(a) The tariff for all categories shall preferably be two part, consisting of fixed and variable charges.

(b) The fixed charges in tariff shall progressively reflect actual fixed cost incurred by Distribution Licensee;

(c) The overall retail supply tariff for different Consumer categories shall progressively reflect the cost of supply for respective categories of Consumers;

(d) The tariff for residential Consumers shall be set considering the affordability of tariff for various class of Consumers;

(e) The tariff shall be set in such a manner that it may not present a tariff shock to any category of Consumers."

6.3. Standalone and Consolidated Revenue Gap/ Surplus at existing tariff

Petitioner's Submission

The Petitioner has proposed a standalone revenue gap and consolidated revenue surplus at existing tariff for FY 2022-23 as shown in the table below:

Table 108: Standalone Revenue Gap/ (Surplus) submitted by Petitioner for FY 2022-23 (In INR Cr)

Particulars	FY 2022-23
Net Revenue Requirement	890.77
Revenue from Retail Sales at Existing Tariff	835.29
Standalone Gap /(Surplus) for the year	**55.48**

Table 109: Cumulative Revenue Gap/ (Surplus) submitted by Petitioner for FY 2022-23 (In INR Cr)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23
Opening (Gap)/Surplus for the Year	**57.02**	**103.17**	**72.44**
Addition during the Year	**39.44**	**(37.48)**	**(55.48)**
Add: Interest on (Gap)/Surplus of Previous Year	4.99	8.25	5.80
Add: Interest on (Gap)/Surplus of Current Year	1.73	(1.50)	(2.22)
Closing (Gap)/Surplus for the Year	**103.17**	**72.44**	**20.54**

Commission's analysis

Regulation 12.5 of the JERC MYT Regulation, 2021 states the following:

"12. Annual Performance Review, Truing-up and tariff determination during the Control Period

12.5

... (c) Carrying Cost shall be allowed for a Generating Company, Transmission Licensee or Distribution Licensee on the amount of revenue gap for the period from the date on which such gap has become due, i.e., from the end of the Year for which true-up has been done, till the end of the Year in which it is addressed, on the basis of actual rate of loan taken by the Licensee to fund the deficit in revenue:

Provided that Carrying Cost on the amount of revenue gap shall be allowed 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 revenue gap is addressed:

Provided also that if no loan has been taken to fund revenue deficit, the Commission shall allow Carrying Cost on simple interest basis at one (1) Year State Bank of India (SBI) MCLR /any replacement thereof as notified by RBI for the time being in effect applicable for 1 Year period, as may be, applicable as on 1st April of the relevant Year plus 100 basis points;

Provided further that in case of revenue surplus, the Commission shall charge the Licensee a Carrying Cost from the date on which such surplus has become due, i.e., from the end of the Year for which true-up has been done, till the end of the Year in which it is addressed on simple interest basis at one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for 1 Year period, as may be, applicable as on 1st April of the relevant Year plus 100 basis points."

Since the Petitioner has not borrowed any loan therefore the Commission allows Carrying Cost on simple interest basis at one (1) Year State Bank of India (SBI) MCLR for FY 2021-22 and FY 2022-23.

Since the Commission has decided not to take up True-up for FY 2020-21 in the current Order due to non-availability of audited accounts, the standalone revenue gap/(surplus) as approved in the APR of FY 2020-21 vide Order dated 30th March 2021 has been considered by the Commission.

Accordingly, the Commission determines the standalone revenue gap/surplus for each year and likewise taking into account the previous year's gap/surplus, determines the cumulative revenue gap/ surplus at the end of FY 2022-23 as shown in the table as follows:

Table 110: Standalone Revenue Gap/ (Surplus) determined by Commission at existing tariff (In INR Cr)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23
Net Revenue Requirement	773.83	775.60	793.81
Revenue from Retail Sales at Existing Tariff	830.69	784.13	796.44
Regulatory Surcharge %	0.00	0.00	0.00
FPPCA Charges	1.15	0.00	0.00
Total Revenue	831.84	784.13	796.44
Standalone Gap /(Surplus) for the year	**(58.01)**	**(8.53)**	**(2.63)**

Table 111: Cumulative Revenue Gap/ (Surplus) determined by Commission at existing tariff (In INR Cr)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23
Opening Gap/(Surplus)	(151.62)	(225.43)	(252.34)
Addition Gap/(Surplus) due to standalone year	(58.01)	(8.53)	(2.63)
Closing Gap/(Surplus)	(209.63)	(233.97)	(254.97)
Average Gap/(Surplus)	(180.63)	(229.70)	(253.65)
Rate of Interest	8.75%	8.00%	8.00%
Carrying cost	(15.80)	(18.38)	(20.29)
Closing Gap/ (Surplus)	**(225.43)**	**(252.34)**	**(275.26)**

The Commission determines a cumulative revenue surplus of INR 275.26 Cr till the FY 2022-23 at existing tariff.

6.4. Treatment of the Revenue Gap/ Surplus and Tariff Design

As derived from above, the resultant cumulative revenue surplus is INR 310.99 Cr. In view of privatization of the department, the Commission has decided to make no modifications in the existing tariff schedule.

6.4.1. Tariff Design

Petitioner's Submission

The Petitioner has submitted that EWEDC is not proposing any hike in consumer Tariff for FY 2022-23 vis-à-vis existing tariff and therefore proposes to continue the Tariff as approved by the Commission for FY 2021-22 vide order dated 30th March 2021. The Petitioner has proposed the tariff schedule as follows:

Table 112: Tariff Schedule proposed by the Petitioner for FY 2022-23

S. No	Consumer Category	Proposed Tariff: Fixed Charge INR/kW/month	Proposed Tariff: Energy Charge INR/kWh
1.	**DOMESTIC SUPPLY (DS)**		
I.	**LT Domestic**		
a.	0-150 kWh per month	10.00	2.50
b.	151-400 kWh per month		4.25
c.	Above 400 kWh per month		4.65
II.	**HT Domestic**	10.00	4.30
2.	**COMMERCIAL/ NON RESIDENTIAL (NRS)**		
I.	**LT Commercial**		
a.	0-150 kWh per month	INR. 20/kW/Month for Single Phase INR. 100/kW/Month for Three Phase	4.50
b.	151-400 kWh per month		4.70
c.	Above 400 kWh per month		5.00
II.	**HT Commercial**	100.00	4.70
3.	**INDUSTRY**		
I	Large Industrial Power Supply (LS)	200.00	4.50
II	Medium Industrial Power Supply (MS)	200.00	4.20
III	Small Industrial Power Supply (SP)	30.00	4.30
4.	**AGRICULTURAL PUMPING SUPPLY (AR)**	-	2.60
5.	**PUBLIC LIGHTING (PL)**		
I	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external agency	100.00	4.80
II	Advertisement/ Neon-sign Boards Advertisement boards, billboards (apart from advertisement boards installed on commercial establishments and charged under commercial tariff)	100.00	6.40
6.	**BULK SUPPLY (BS)**	200.00	4.40

S. No	Consumer Category			Proposed Tariff	
				Fixed Charge INR/kW/month	Energy Charge INR/kWh
7.	**TEMPORARY SUPPLY**			Tariff shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both. For multi activity pursuit, applicable Tariff for temporary connection shall be with reference to that of commercial category for permanent supply.	
8.	**ELECTRIC VEHICLE CHARGING STATION**			-	3.60

Commission's analysis

The Commission has determined the retail tariff for the FY 2022-23 in accordance with the principles stated in the Electricity Act, 2003 Tariff Policy, 2016, and the JERC MYT Regulations, 2021. The Tariff design in general is guided by the following principles:

1. Cost reflective: The tariffs determined should efficiently reflect the cost of supply for each consumer category.

2. Progressive tariffs: Ensuring progressivity among tariffs by having telescopic tariff slabs which encourages efficient consumption and at the same time allows intra-category cross-subsidy by way of charging higher tariff for higher consumption to subsidise the lower consumption consumers

3. Revenue neutrality: There should be no impact on the utility's yearly revenue due to rationalization of tariffs i.e. the overall status quo should be maintained.

4. Affordability: Assessing affordability of electricity for Domestic and Commercial consumers for defining slab ranges and setting tariffs

5. Revenue stability: Tariff should ensure adequate fixed cost recovery for utilities from fixed/demand charges

6. Avoiding tariff shocks: Tariff shocks should be avoided, and stakeholders should be able to predict the future trends in tariffs

7. Demand management and grid stability: Demand management and grid stability should be ensured with demand-based tariffs

8. Simplified tariff structure: Tariff structure should be simplified to make it easily administrable by the utility and easy to understand for the consumer.

9. Smart tariff design: Tariff rate design should take into consideration trends in electric power such as small-scale renewable generation by consumers, energy efficiency, electric vehicle charging, etc.

While all the above parameters contribute significantly to developing a sustainable tariff framework, there are certain parameters namely Cost of Supply and Tariff Affordability which are of importance and constitute the building blocks in achieving the overall objective. The context and the approach for these parameters have been discussed as follows:

1. *Cost of Supply*

a) Context

Due to electricity being a crucial utility item for all consumers, over the period of time, various socio-economic issues have been factored in to determine the end user's tariffs. This has unfortunately led to severe imbalance between the tariffs levied vis-a-vis the cost of supply of the electricity, causing distress to the Discom. For example, in order to ensure that tariffs are kept in check for residential consumers, while still allowing cost recovery for Discoms, cross subsidy is built in between categories. The tariffs so determined, are skewed, with tariff for industrial and commercial consumers being higher and for other categories being lower than their respective costs of supply. The implications of this imbalance in tariffs is twofold – uncompetitive industries owing to higher input costs and inability of Discoms to recover sufficient tariffs from domestic consumers, resulting in financial distress. The issue is more pronounced for rural supply where tariffs are highly subsidized, actual cost of supply is higher and revenue recovery is poor.

It is thus essential that tariffs reflect the true cost to service a category of consumer. As a crucial first step towards cost-reflective tariffs, it is important for distribution utilities to determine the costs of supply (which cascade from generation to transmission and finally to distribution and retail supply of power) that should be prudently recovered from each consumer category. These costs should correspond to the actual costs being imposed by each consumer category on the Discom. By determining consumer category wise costs of supply, the Discom would be in a better position to allocate costs where relevant and determine how tariffs can be levied fairly on each category.

b) Approach:

The overall approach that can be followed for accurately determining the Cost of Supply has been discussed as follows:

Presently, the most commonly used approach for determining the cost of supply of electricity for tariff determination is the Average Cost of Supply (ACoS) method. The ACoS is computed by dividing the Annual Revenue Requirement (ARR) determined by the Commission for recovery through tariffs by the total energy sales for the year. However, this methodology doesn't indicate the costs incurred by consumers at different voltage levels using different assets of the network. Therefore, it doesn't help in determining accurate tariffs for particular consumers, eventually resulting in insufficient cost coverage.

As a next logical step, the Voltage wise cost of supply (VCoS) method provides a better reflection of cost to supply to consumers at different voltage levels. A simplified version of the same was suggested by Hon'ble ATE in 2010, to determine VCoS in the absence of all necessary data. In this method, the power purchase costs and other costs (such as network costs, wheeling costs etc.) are allocated to various consumer categories based on energy input or energy sales (as considered appropriate by the State Commission). This approach factors in the voltage level differentiation based on losses, however, it does not factor in asset utilization at different voltage levels.

A more refined version of determination of VCoS uses three parameters for allocating various costs to voltage levels – energy input at each voltage level, energy sales and asset allocation to voltage levels. The losses segregated voltage wise (as percentage of input energy) are to be allocated to different voltage levels based on energy input to each voltage level (as explained in subsequent sections). Subsequently, the cost elements such as power procurement costs, employee expenses, administrative and general expenses and income tax can be allocated to each voltage levels based on total sales at each voltage level. The cost elements, which are dependent on assets such as depreciation, interest costs, return allowed to utility etc. are allocated in ratio of assets allocated to each voltage level. The sum of all the cost components at each voltage level is the cost to supply the particular voltage (EHT/HT/LT).

The Commission is of the opinion that while VCoS differentiates cost allocation based on voltage levels, it does not factor in consumer category level differentiation. For instance, at the same LT level, cost of supplying electricity to a Commercial consumer may be different from that of a Residential consumer. Thus, it believes that the most progressive way forward for EWEDC is to accurately determine the cost of supply is to attempt to determine Cost of Supply at various category level. The Commission notes that States like Andhra Pradesh and Telangana have determined Category wise Cost of Supply albeit with several assumptions and EWEDC must also attempt to determine the same.

The Commission is of the opinion that for determination of the Category wise Cost of Supply, the embedded cost methodology is an appropriate starting point.

The Commission strongly believes that determination of Category wise Cost of Supply is essential to ensure cost reflectivity in tariffs fixed for different categories. However, the Commission feels that to carry out this exercise a lot of field level information would be required such as Category wise co-incident and non- co-incident demand, Voltage wise value of assets (Voltage wise asset ratio), Voltage wise losses, Category wise break-up of costs related to Metering, Billing and Collection etc. which currently the Petitioner doesn't maintain. Therefore, in absence of the same, the Commission is unable to determine the Category wise Cost of Supply in this Order but directs the Petitioner to start maintaining this data and submit the same in the tariff proceedings of next year. In absence of the requisite data for determination of voltage-wise/category-wise cost of supply as mentioned above, the Commission as part of this Tariff Order has determined the tariff according to the Average Cost of Supply (ACoS).

2. *Tariff Affordability*

a) Context

The Commission understands that the consumer base of Distribution Licensee is varied and covers a wide spectrum of socio-economic backgrounds, specially the domestic category consumers. It is also aware that most low-income households spend a substantial share of their income on utility services such as electricity, heating and water. However, any envisaged tariff reforms are often objected to avoid further burdening of these consumers. But to improve the quality of service of electricity, the Distribution Licensee has to undertake significant capital expenditure which eventually deteriorates the affordability of tariffs. Thus, to tackle this problem and in the spirit of economic wellbeing of all consumer classes, the concept of cross-subsidies has been built into the current tariff structure.

However, the Commission believes that a more scientific and logical approach can be adopted to identify the right categories of consumers and the right cross-subsidy/subsidy requirement that will benefit the end consumers at the same time. Hence, the Commission believes that there is a strong need to develop a scientific methodology to assess the social impact of electricity tariffs.

The overall approach that can be followed for determining the tariff affordability has been discussed as follows.

b) Approach

On reviewing methodologies adopted globally for social impact assessment of electricity tariffs by studying international research reports and studying model practices internationally, the Commission found that Tariff Affordability Ratio (TAR) is a reliable parameter to measure affordability of electricity in households.

TAR is defined by obtaining the burden incurred by a household for electricity as compared to the overall household expenditure. The rationale behind this concept is that the electricity is basic utility and is unavoidable in today's scenario, however, this does not ensure that the expenditure level is in line with the overall household expenditure. Hence, this concept helps to understand the affordability level of electricity on households with different economic levels.

The electricity expenditure can be determined initially for domestic consumers by computing the average consumption levels across each slab and the household expenditure can be estimated from national surveys of household expenditure across economic levels conducted by organizations like NSSO. Thereafter the distribution of consumers of the Distribution Licensee across tariff slabs can be mapped across the established economic levels to develop the final affordability ratio matrix for the Distribution Licensee's domestic consumer base.

Following the identification of the current ratio of Tariff Affordability, the Commission in consultation with the stakeholders will develop benchmarks for acceptable affordability levels by studying trends across countries with a demography and energy scenario similar to that of India and propose appropriate tariffs. The final output shall help understand the Commission to modify tariffs in cases where there is more room for tariff increase or a need to correct tariffs. The exercise would also help the Commission in setting tariff slabs as per the paying capacity of the consumers which would be beneficial especially for Domestic category consumers. Additionally, this shall also help the Government to formulate better schemes to effectively channelize its intended benefits.

The Commission in these tariff proceedings is not carrying out this exercise due to unavailability of accurate data. The Petitioner is directed to ensure the sanctity of the data maintained pertaining to various categories.

Based on the discussions above, the Commission is continuing with its existing approach of determination of tariff for various consumer categories based on the Average Cost of Supply (ACoS) and reduction of Cross Subsidy amongst various consumer categories, ensuring consumer tariffs progressively moving towards the cost.

Cross Subsidy

As per Section 61 (g) of the Electricity Act 2003

*"(g) that the **tariff progressively reflects the cost of supply** of electricity and also, **reduces and eliminates cross-subsidies** within the period to be specified by the Appropriate Commission;"*

For reduction of cross subsidies, the Tariff Policy 2016 in Section 8.3 stipulates as below:

*"For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought **within ±20% of the average cost of supply**. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy."*

In order to achieve the objectives of the Tariff Policy 2016 of bringing down the cross-subsidy levels amongst various consumer categories within ±20% of the average cost of supply, the Commission has tried to rationalize the tariff applicable to various consumer categories.

The limit of cross subsidy, as envisaged in the Tariff Policy 2016, can't be achieved by rationalizing the tariff in a single year, as this may lead to tariff shock to the cross subsidized consumers. In this Tariff Order, the Commission has continued its approach of rationalization of the tariff for various consumer categories and reducing the cross subsidy.

Accordingly, in this Tariff Order, the Commission has designed tariff for various consumer categories considering the Average Cost of supply in line with the provisions of the Tariff Policy, 2016. While designing the tariff for FY 2022-23, the Commission has reduced the cross-subsidy levels with an endeavor to bring the same within range specified in Tariff Policy 2016.

6.4.2. Approved Final Tariff Schedule

The existing retail tariff and tariff now approved by the Commission for each consumer category has been shown in the table below:

Table 113: Existing and approved tariff

S. No	Consumer Category	Existing Tariff		Approved Tariff	
		Fixed Charge INR/kW/month	Energy Charge INR/kWh	Fixed Charge INR/kW/month	Energy Charge INR/kWh
1.	**DOMESTIC SUPPLY (DS)**				
I.	**LT Domestic**				
a.	0-150 kWh per month	10.00	2.50	15.00	2.75
b.	151-400 kWh per month		4.25		4.25
c.	Above 400 kWh per month		4.65		4.65
II.	**HT Domestic**	10.00	4.30	15.00	4.30
2.	**COMMERCIAL/ NON RESIDENTIAL (NRS)**				
I.	**LT Commercial**				
a.	0-150 kWh per month	INR. 20/kW/Month for Single Phase INR. 100/kW/Month for Three Phase	4.50	INR. 25/kW/Month for Single Phase INR. 100/kW/Month for Three Phase	4.50
b.	151-400 kWh per month		4.70		4.70
c.	Above 400 kWh per month		5.00		5.00
II.	**HT Commercial**	100.00	4.70	100.00	4.50
3.	**INDUSTRY**				
I	Large Industrial Power Supply (LS)	200.00	4.50	200.00	4.50
II	Medium Industrial Power Supply (MS)	200.00	4.20	200.00	4.20
III	Small Industrial Power Supply (SP)	30.00	4.30	30.00	4.30
4.	**AGRICULTURAL PUMPING SUPPLY (AR)**	-	2.60	-	2.60
5.	**PUBLIC LIGHTING (PL)**				
I	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external agency	100.00	4.80	100.00	4.80
II	Advertisement/ Neon-sign Boards Advertisement boards, billboards (apart from advertisement boards installed on commercial establishments	100.00	6.40	100.00	6.40

S. No	Consumer Category	Existing Tariff		Approved Tariff	
		Fixed Charge INR/kW/month	Energy Charge INR/kWh	Fixed Charge INR/kW/month	Energy Charge INR/kWh
	and charged under commercial tariff)				
6.	**BULK SUPPLY (BS)**	200.00	4.40	150.00	4.20
7.	**TEMPORARY SUPPLY**	Tariff shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both. For multi activity pursuit, applicable Tariff for temporary connection shall be with reference to that of commercial category for permanent supply.		Tariff shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both. For multi activity pursuit, applicable Tariff for temporary connection shall be with reference to that of commercial category for permanent supply.	
8.	**ELECTRIC VEHICLE CHARGING STATION**	-	3.60	-	3.60

6.4.3. Revenue from Approved Retail Tariff for FY 2022-23

Based on the retail tariff approved above, the Revenue from approved tariff is shown in the following table. The Commission has not estimated any revenue for Electric Vehicle Charging Station, Residential Complexes and Industrial Complexes categories as no sales have been booked under the respective categories. the Commission as of now approves the k factor for the category as shown in the table, however, directs the Petitioner to submit the requisite data for energy sales, no. of consumers and connected load in case any consumers are identified under these categories. Accordingly, the revenue from approved retail tariff is determined as follows:

Table 114: Revenue from approved retail tariff determined by Commission (In INR Cr)

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)	K factor
1	**DOMESTIC SUPPLY (DS)**	**798.15**	**16.68**	**348.62**	**365.31**	**4.58**	**0.88**
A	LT Domestic						
1	0-150 units	63.77	4.12	17.54	21.65	3.40	0.66
2	151-400 units	232.99	5.92	99.02	104.94	4.50	0.87
3	401 and above units	470.49	6.09	218.78	224.87	4.78	0.92
B	HT Domestic	30.91	0.55	13.29	13.84	4.48	0.87
2	**COMMERCIAL / NON RESIDENTIAL (NRS)**	**406.67**	**52.74**	**191.77**	**244.51**	**6.01**	**6.73**
A	LT Commercial						
1	0-150 units (Single Phase)	3.88	0.65	1.75	2.40	6.18	1.19
2	151-400 units (Single Phase)	11.29	0.31	5.31	5.61	4.97	0.96
3	401 and above units (Single Phase)	20.24	0.15	10.12	10.27	5.07	0.98
1	0-150 units (Three Phase)	0.31	0.05	0.14	0.18	5.98	1.15

S. No	Category	Energy Sales (MU)	Fixed Charges (INR Cr.)	Energy charges (INR Cr.)	Total Charges (INR. Cr.)	ABR (INR./unit)	K factor
2	151-400 units (Three Phase)	4.93	0.73	2.32	3.04	6.18	1.19
3	401 and above units (Three Phase)	148.63	21.95	74.32	96.27	6.48	1.25
B	HT Commercial	217.38	28.91	97.82	126.73	5.83	1.13
3	**INDUSTRY**	**233.38**	**32.33**	**101.75**	**134.07**	**5.74**	**1.11**
1	Large Industrial Power Supply (LS)	118.77	14.94	53.45	68.39	5.76	1.11
2	Medium Industrial Power Supply (MS)	98.26	16.50	41.27	57.76	5.88	1.14
3	Small Industrial Power Supply (SP)	16.35	0.89	7.03	7.92	4.84	0.94
4	**AGRICULTURAL PUMPING SUPPLY(AR)**	**1.49**	**0.00**	**0.39**	**0.39**	**2.60**	**0.50**
1	Agricultural Pumping Supply	1.49	0.00	0.39	0.39	2.60	0.50
5	**PUBLIC LIGHTING (PL)**	**14.75**	**0.57**	**7.08**	**7.64**	**5.18**	**1.00**
6	**Bulk Supply (BS)**	**78.25**	**7.68**	**32.86**	**40.54**	**5.18**	**1.00**
1	Bulk Supply	78.25	7.68	32.86	40.54	5.18	1.00
7	**Temporary Supply**	**3.56**	**0.00**	**2.88**	**2.88**	**8.09**	**1.56**
1	Temporary Supply	3.56	0.00	2.88	2.88	8.09	1.56
8	**Electric Vehicle Charging Station**	-	-	-	-	-	-
1	Electric Vehicle Charging Station	-	-	-	-	-	-
	TOTAL	**1536.24**	**110.00**	**685.35**	**795.34**	**5.18**	**1.00**

The Commission approves revenue from approved Retail Tariff of INR 795.34 Cr. for the FY 2022-22.

The average decrease in the retail tariff now approved by the Commission vis-à-vis the prevailing tariff is 1.58%. The table below provides the category wise Average Cost of Supply (ACoS), existing Average Billing Rate (ABR), Approved ABR and category wise increase in tariff approved by Commission.

Table 115: Tariff increase approved by Commission

Category	ACoS (Rs/kwh)	ABR at Existing Tariff (Rs/kwh)	ABR at Approved Tariff (Rs/kwh)	Increase (%)
Domestic	5.17	4.49	4.58	1.66%
Commercial	5.17	6.23	6.01	-4.19%
Large Supply	5.17	5.73	5.76	0.62%
Medium Supply	5.17	5.86	5.88	0.42%

Category	ACoS (Rs/kwh)	ABR at Existing Tariff (Rs/kwh)	ABR at Approved Tariff (Rs/kwh)	Increase (%)
Small Power	5.17	4.83	4.84	0.28%
Agriculture	5.17	2.60	2.60	0.00%
Public Lighting	5.17	5.18	5.18	0.01%
Bulk Supply	5.17	5.71	5.18	-10.26%
Others Temporary Supply	5.17	8.09	8.09	0.00%
Total	**5.17**	**5.22**	**5.18**	**-0.88%**

It can be observed in the above table that the Commission has rationalised the tariff levels for domestic, Commercial and Bulk Supply categories has reduced/maintained the tariff levels at lower than average tariff hike.

6.4.4. Cumulative Revenue Gap/ (Surplus) at Approved Tariff

Accordingly, the resultant cumulative Revenue Gap/Surplus has been shown in the following table:

Table 116: Cumulative Revenue Gap/ (Surplus) approved by Commission for FY 2022-23 (In INR Cr)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23
Opening Gap/(Surplus)	(151.62)	(225.43)	(252.34)
Addition Gap/(Surplus) due to standalone year	(58.01)	(8.53)	(1.53)
Closing Gap/(Surplus)	(209.63)	(233.97)	(253.87)
Average Gap/(Surplus)	(180.63)	(229.70)	(253.11)
Rate of Interest	8.75%	8.00%	8.00%
Carrying cost	(15.80)	(18.38)	(20.25)
Closing Gap/ (Surplus)	**(225.43)**	**(252.34)**	**(274.12)**

The Commission approves a cumulative revenue surplus of INR 274.12 Cr till FY 2022-23.

6.4.5. Highlights of the Tariff Structure

The highlights of the tariff structure approved by the Commission for FY 2022-23 are as follows:

1. The Commission observed that the Petitioner had a standalone revenue surplus in each year from FY 2016-17 to FY 2019-20. Further, it is observed that the projected standalone surplus for FY 2022-23 and cumulative revenue surplus till FY 2022-23 at existing tariff is expected to be INR 2.63 Cr and INR 275.26 Cr respectively. Accordingly, the Commission has rationalised the tariff for FY 2022-23.

2. In view of the same, the Commission approves rationalisation in the retail tariff for existing categories. Even after the changes, the projected standalone revenue surplus at the end of FY 2022-23 is expected to be INR 1.53 Cr and net reduction of tariff is to the tune of around 1%..

3. The Commission has approved the Average Billing Rate (ABR) of INR 5.18/kWh against the approved Average Cost of Supply (ACoS) of INR 5.17/kWh.

4. On account of cumulative revenue surplus in FY 2022-23, the Petitioner is hereby directed to not recover FPPCA from all consumer categories starting from 1st April 2022 onwards till further directions of the Commission. The Petitioner is, however, directed to timely submit the quarterly FPPCA calculation to the Commission for review.

7. Chapter 7: Open Access Charges for the FY 2022-23

7.1. Wheeling Charges

7.1.1. Allocation Matrix - Allocation of ARR into Wheeling and Retail Supply of Electricity

Petitioner's Submission:

The Petitioner has submitted the bifurcation of all expenses of FY 2022-23 between the functions of wheeling business (wire business) and retail supply business based on the Regulation 49 of the JERC MYT Regulations, 2021. The summary of the allocation statement and the segregation of ARR into wheeling and retail supply business for FY 2022-23 is given in the table below:

Table 117: Allocation matrix as submitted by the Petitioner

Particulars	ARR Projected for FY 2022-23 (INR. Cr)	Allocation %		ARR Allocation for FY 2022-23 (INR. Cr)	
		Wire Business	Retail Supply	Wire Business	Retail Supply
Power Purchase Expense	749.68	0%	100%	0.00	749.68
Employee Cost	93.86	40%	60%	37.54	56.32
A&G Expenses	7.55	50%	50%	3.78	3.78
R&M Expenses	13.89	90%	10%	12.5	1.39
Depreciation	12.24	90%	10%	11.02	1.22
Interest on Loan	0.44	90%	10%	0.39	0.04
Interest on Working Capital	0	10%	90%	0	0
Interest on Consumer Security Deposit	8.31	10%	90%	0.83	7.48
Return on Equity	22.45	90%	10%	20.2	2.24
Bad and Doubtful Debt	0.00	0%	100%	0.00	0.00
Income Tax	0.00	90%	10%	0.00	0.00
Annual Revenue Requirement	**908.43**			**86.27**	**822.16**
Less: Non-Tariff Income	17.66	10%	90%	1.77	15.89
Net Revenue Requirement	**890.77**			**84.5**	**806.27**

The Petitioner has further submitted that it has computed the wheeling charges based on the following methodology:

a) O&M Expenses consisting of Employee, A&G and R&M expenses are allocated to each voltage level based on number of consumers.

b) All expenses other than the O&M expenses are allocated to each voltage level based on voltage wise asset allocation.

c) The resultant cost at HT/EHT voltage level derived after performing the above steps is then divided between LT and HT/EHT voltage level on the basis of input energy at respective voltage levels, since the HT/EHT network is used by consumers of both HT/EHT and LT voltage levels.

Accordingly, the computation of Wheeling charges as submitted by the Petition has been shown in the following table:

Table 118: Wheeling Charge calculation as submitted by Petitioner

Category	O&M expenses (INR Cr.)	Other Expenses (INR Cr.)	Total Expenses (INR Cr.)	Sales (MU)	Wheeling Charges (INR/kWh)
Low Tension (LT) Level	53.65	26.10	79.74	999.76	0.80
High Tension (HT)/ Extra High Tension (EHT)Level	0.18	4.58	4.76	595.79	0.08
Total	**53.83**	**30.68**	**84.50**	**1595.55**	

Commission's analysis:

The allocation between wheeling and retail supply business for the FY 2022-23 as per the ARR approved in this Order is provided in the table below:

Table 119: Allocation matrix approved by Commission

Particulars	Allocation (%)		FY 2022-23		
	Wires Business (%)	Retail Supply Business (%)	Wires Business (Rs Cr)	Retail Supply Business (Rs Cr)	Total ARR (Rs Cr)
Power purchase expenses inclusive of Inter-State Transmission expenses	*0%*	*100%*	0.00	649.94	649.94
Employee costs	*40%*	*60%*	37.17	55.75	92.92
Administration and General Expenses	*50%*	*50%*	3.33	3.33	6.65
Repair and Maintenance Expenses	*90%*	*10%*	13.96	1.55	15.51
Depreciation	*90%*	*10%*	11.91	1.32	13.24
Interest on Loan	*90%*	*10%*	1.38	0.15	1.53
Interest on Working Capital	*10%*	*90%*	-	-	-
Interest on consumer security deposit	*10%*	*90%*	0.89	8.00	8.89
Return on Equity	*90%*	*10%*	20.51	2.28	22.79
Bad & Doubtful Debt written off	*0%*	*100%*	0.00	0.00	0.00
Income Tax	*90%*	*10%*	0.00	0.00	0.00
Total Revenue Requirement			**89.15**	**722.33**	**811.47**
Less: Non-Tariff Income	*10%*	*90%*	1.77	15.89	17.66

Particulars	Allocation (%)		FY 2022-23		
	Wires Business (%)	Retail Supply Business (%)	Wires Business (Rs Cr)	Retail Supply Business (Rs Cr)	Total ARR (Rs Cr)
Net Revenue Requirement			**87.38**	**706.43**	**793.81**

To determine the wheeling charges, the wheeling costs are allocated on the basis of voltage levels. The wheeling charges are levied for the distribution network utilized by the Open Access consumers and primarily comprises of O&M Expenses and other costs as provided in the table above.

The methodology adopted for allocating the derived wheeling costs at respective voltage levels has been elaborated as follows:

- O&M Expenses consisting of Employee, A&G and R&M expenses are allocated to each voltage level on the basis of number of consumers
- All expenses other than the O&M expenses are allocated to each voltage level on the basis of voltage wise asset allocation. The Petitioner in this regard was directed to submit the voltage wise asset allocation but has failed to submit the desired information and in the absence of such information, the Commission has assumed the voltage wise asset allocation.
- The resultant cost at HT/EHT voltage level derived after performing the above steps is then divided between LT and HT/EHT voltage level on the basis of input energy at respective voltage levels, since the HT/EHT network is used by consumers of both HT/EHT and LT voltage levels.
- The energy input has been determined assuming the cumulative loss level of HT/EHT voltage as 4.03%. The Petitioner in this regard has failed to submit the voltage wise losses. The resultant losses have been loaded to the LT voltage level in order to maintain the overall Intra-State T&D loss at 8.80% as approved in the Business Plan Order dated 11th July 2022.

Table 120: Parameters assumed for voltage wise allocation of wheeling costs

Category	No. of Consumers	Asset Allocation (%)	Sales (MU)	Cumulative Voltage wise Losses (%)
Low Tension (LT) Level	235,937	60.00%	1,070.92	14.76%
High Tension (HT)/ Extra High Tension (EHT) Level	1,609	40.00%	465.32	4.03%
Total	**237,546**	**100.00%**	**1,536.24**	**8.80%**

Accordingly, the Commission approves the Wheeling Charges as shown in the table below:

Table 121: Allocation of costs based on voltage level

Category	O&M (INR Cr)	Others (INR Cr)	Total (INR Cr)	Sales (MU)
Low Tension (LT) Level	54.09	19.30	73.38	1,070.92
High Tension (HT)/ Extra High Tension (EHT) Level	0.37	12.86	13.23	465.32
Total	**54.46**	**32.16**	**86.61**	**1,536.24**

Table 122: Wheeling Charges approved by Commission

Category	O&M (INR Cr)	Others (INR Cr)	Total (INR Cr)	Sales (MU)	Wheeling Charges (INR/kWh)
Low Tension (LT) Level	54.35	28.46	82.81	1,070.92	0.77
High Tension (HT)/ Extra High Tension (EHT) Level	0.11	3.70	3.81	465.32	0.08
Total	**54.46**	**32.16**	**86.61**	**1,536.24**	

The Commission approves wheeling charge of INR 0.77/kWh at LT voltage level and INR 0.08/kWh at HT/EHT voltage level

7.2. Additional Surcharge

Petitioner's submission:

The Petitioner has computed the additional surcharge based on the provisions of Regulation 4.5(2) and 5.2(1)(b) of JERC (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017. The additional surcharge determined by the Petitioner for FY 2022-23 has been provided in the table as follows:

Table 123: Additional Surcharge calculation as submitted by Petitioner

Particulars	FY 2022-23
Total Power Purchase cost approved	749.68
Fixed Cost component in Power Purchase Cost (excluding Transmission Charges)	218.16
Energy Sales (MU)	1595.55
Additional Surcharge (INR/kWh)	**1.37**

Commission's analysis:

The Commission has notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017 (as amended from time to time). Regulation 4.5 (1) of the said Regulations states the following:

"An Open Access Consumer, receiving supply of electricity from a person other than the Distribution Licensee of his area of supply, shall pay to the Distribution Licensee an additional surcharge in addition to wheeling charges and cross-subsidy surcharge, to meet the fixed cost of such Distribution Licensee arising out of his obligation to supply as provided under sub-section (4) of Section 42 of the Act"

Regulation 4.5 (2) of the said Regulations stipulates:

This additional surcharge shall become applicable only if the obligation of the Licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed costs by the Licensee consequent to such a contract. However, the fixed costs related to network assets would be recovered through wheeling charges.

Further, Regulation 5.2 (1) (b) states the following:

The quantum of drawal of electricity by a partial Open Access Consumer from the Distribution Licensee during any Time Block of a Day should not exceed the "Admissible Drawl of Electricity by the Open Access Consumer" which is the difference of Contract Demand and maximum quantum of Open Access for which approval has been granted by the Nodal Agency.

[Illustration: If an Open Access Consumer with a Contract Demand of 10 MW has been given an approval for a maximum Open Access quantum of 6MW for a period of 3 Months, the Admissible Drawl of Electricity from the Distribution Licensee during any Time Block shall be 4 MW for any Day during a period of 3 Months.]"

Therefore, in accordance with the above Regulations, the Commission has determined the Additional Surcharge as per the following:

Table 124: Additional Surcharge approved by Commission

Particulars	2022-23
Total Power Purchase cost approved	649.94
Fixed Cost component in Power Purchase Cost (excluding Transmission Charges)	215.78
Energy Sales (MU)	1536.24
Additional Surcharge (INR/kWh)	**1.40**

Earlier, a consumer availing Open Access was required to pay fixed charges on contracted load even when the load was drawn partially from the Distribution Licensee. In addition, the consumer was also required to pay wheeling charges, additional surcharge and the cross-subsidy surcharge. **As per the new "Open Access Regulations, 2017" (as amended from time to time), a consumer may choose to pay fixed charges on reduced demand after adjusting for demand drawn through Open Access in accordance with the regulation.**

The Commission approves an Additional Surcharge of INR 1.40/kWh for FY 2022-23.

The Commission directs the Petitioner to submit quarterly details of the power stranded on account of consumers opting for open access along with the Additional Surcharge recovered from these consumers. The Commission will analyse the information and change the applicable Additional Surcharge, if required.

7.3. Cross-Subsidy Surcharge

Petitioner's submission:

The Petitioner has adopted the same methodology for computation of Cross-Subsidy Surcharge as approved by the Commission in the Tariff Order for FY 2021-22. The cross-subsidy surcharge determined by the Petitioner for FY 2022-23 has been provided in the table as follows:

Table 125: Cross-Subsidy Surcharge as proposed by the Petitioner

Category	VCoS (INR/kWh)	ABR (INR/kWh)	Cross- Subsidy (INR/kWh)
Low Tension (LT) Level	6.26	4.91	-
High Tension (HT)/ Extra High Tension(EHT) Level	4.45	5.78	1.32

Commission's analysis:

The Commission in this Order has calculated the cross-subsidy surcharge with respect to voltage wise cost of supply. The following approach has been adopted to determine the voltage wise cost of supply:

- Voltage Wise losses are assumed for HT/EHT voltage level. The remaining losses are adjusted in the LT voltage level in order to maintain the Intra-State T&D losses at 8.80%, as approved in the ARR for FY 2022-23. Voltage wise losses assumed at each level have been shown in the table below:

Table 126: Voltage wise losses assumed by Commission

Category	Voltage Level Loss (%)	Cumulative Losses upto that voltage level (%)
Low Tension (LT) Level	10.73%	14.76%
High Tension (HT)/ Extra High Tension (EHT) Level	4.03%	4.03%
Total	**8.80%**	**8.80%**

Using these losses, the energy input at each voltage level is determined based on the energy sales. The following table shows the energy input at each voltage level

Table 127: Energy Input at each voltage level (MU)

Category	Energy Sales (MU)	Cumulative Losses (%)	Energy Input (MU)
Low Tension (LT) Level	1,070.92	14.76%	1,199.61
High Tension (HT)/ Extra High Tension (EHT) Level	465.32	4.03%	484.86
Total	**1,536.24**	**8.80%**	**1,684.48**

Now the overall ARR approved for FY 2022-23 is divided into variable and fixed ARR with variable ARR comprising of variable component of the power purchase cost and fixed ARR comprising of all the other costs.

The fixed component comprising of fixed cost of power purchase, O&M etc. is further allocated to each voltage category as per the following principles:

- The fixed cost of power purchase is assigned to each voltage level on the basis of energy input at respective voltage levels.
- The O&M expenses are allocated to each voltage level on the basis of the number of consumers. The resultant cost allocated to HT/EHT level is then further allocated between HT/EHT and LT level on the basis of input energy, as the HT/EHT network is utilized by both LT and HT/EHT network consumers.
- The remaining fixed costs are allocated on the basis of voltage wise asset allocation assumed earlier and further allocated to respective voltage levels on the basis of input energy.

Table 128: Parameters used for allocation of fixed costs

Category	Energy Input (MU)	Voltage wise Asset Allocation (%)	Number of Consumers
Low Tension (LT) Level	1,199.61	60.00%	235065
High Tension (HT)/ Extra High Tension(EHT) Level	484.86	40.00%	1589
Total	**1,684.48**	**100.00%**	**236654**

The Variable component of the Power purchase cost is allocated on the basis of energy input. The Voltage wise cost of supply (VCoS) is then determined on the basis of energy sales of respective categories. Accordingly, the VCoS is determined as shown in the table below:

Table 129: Voltage Wise Cost of Supply (VCoS)

Category	Allocated Fixed Cost (INR Cr)	Allocated Variable Cost (INR Cr)	Total Cost (INR Cr)	Energy Sales (MU)	VCoS (INR/kwh)
Low Tension (LT) Level	369.35	233.85	603.19	1,070.92	5.63
High Tension (HT)/ Extra High Tension (EHT) Level	96.10	94.52	190.62	465.32	4.27
Total	**465.45**	**328.36**	**793.81**	**1,536.24**	

This, VCoS is then used to determine the Cross-Subsidy Surcharge at each voltage level.

Table 130: Cross-Subsidy Surcharge approved by Commission (INR/kWh)

Category	VCoS (INR/kWh)	ABR (INR/kWh)	Cross- Subsidy (INR/kWh)
Low Tension (LT) Level	5.63	4.94	-
High Tension (HT)/ Extra High Tension (EHT) Level	4.27	5.73	1.47

The Commission approves nil Cross-Subsidy Surcharge at LT Voltage level and INR 1.47/kWh at HT/EHT Voltage level, in FY 2022-23.

8. Chapter 8: Fuel and Power Purchase Adjustment Mechanism

The State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry receive power from the Central Generating Stations, State Generating Stations, Independent Power Producer's (IPP's) through the long-term power purchase agreements and short-term purchases – through exchange, bilateral purchases etc. The distribution licensees procure power from various available sources and supply power to the consumers at retail tariffs determined by the Commission. Power purchase cost accounts for more than 80% of the Annual Revenue Requirements (ARR) of the distribution licensees and includes the cost paid for procurement of power, transmission charges, Deviation Settlement Mechanism (DSM) charges, State Load Despatch Center (SLDC)/ Regional Load Despatch Center (RLDC) charges and is netted off with revenue earned from the sale of surplus power.

The cost of the long-term power being procured by the distribution licensees is fixed by the Central Electricity Regulatory Commission (CERC) for plants supplying power to more than one State/UT (for example NTPC, NHPC etc.) and by the JERC for plants located within the region (for IPP's, licensees own generation and other State generating sources). Charges for the Over-drawal/Under-drawal from the Grid and the Inter-State Transmission charges, RLDC charges are fixed by the CERC, while Intra-State Transmission charges and SLDC charges are fixed by the JERC. Short-term purchase/ sale of power is done through traders, bilateral contracts, banking and power exchanges at market-determined prices.

While determining retail tariff for any year, the Commission first determines the ARR based on the projection of various cost elements including power purchase cost. Power purchase cost of the distribution licensee is derived from the power purchase quantum and per unit power purchase cost. Quantum of power purchase depends upon the energy sales to the retail consumer and distribution losses, out of which energy sales is not under the control of the distribution licensee. There is also variation in actual per unit power purchase cost vis-a-vis projected per unit power purchase cost due to change in fuel cost, change in power purchase mix i.e. thermal /hydel/renewable mix, long term/short-term power mix etc. This makes power purchase cost uncontrollable in nature.

The Commission undertakes the truing up exercise for the variation in the cost and revenue once the audited accounts of the distribution licensee are available. For example, True-up of the FY 2017-18 will be undertaken by the Commission once the audited accounts of the FY 2017-18 are available. If the audited accounts for the FY 2017-18 are prepared timely, the impact of True-up of various cost and revenue items is allowed in the tariff of the FY 2020-21, along with the carrying cost for 2 years. As the power purchase cost is the major cost element of the ARR of the distribution licensee, adjustment due to change in power purchase cost at regular intervals is important in order to avoid the burden of carrying cost on the additional power purchase cost incurred during the year.

8.1. Legal Provisions

The relevant provisions of the Electricity Act, Regulations, Policy document and the ATE judgments, which enable the Commission to devise, adopt and implement a power purchase/ fuel price adjustment mechanism are as follows:-

(a) Electricity Act, 2003- Section 62 (4)

"No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified."

(b) Tariff Policy, 2016, clause 5.11 – sub-clause (h-4)

"Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation, taxes and cess, variations in power purchase unit costs including on account of adverse natural events."

(c) Tariff Policy, 2016, clause 8.2– sub-clause 8.2.1-(1)

"8.2 Framework for revenue requirements and costs
Actual level of retail sales should be grossed up by normative level of T&D losses as indicated in MYT trajectory for allowing power purchase cost subject to justifiable power purchase mix variation (for example, more energy may be purchased from thermal generation in the event of poor rainfall) and fuel surcharge adjustment as per regulations of the SERC."

(d) Hon'ble ATE judgement in OP1 of 2011 dated 11 November 2011

The Hon'ble ATE directed the SERCs to develop a power purchase cost adjustment mechanism within six months of the date of the Order. The relevant excerpt of the Order is shown as follows:
"(vi)Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment should preferably be on monthly basis on the lines of the Central Commission's Regulations for the generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this Order must put in place such formula/mechanism."

8.2. Formula

The following mechanism shall be followed for calculation and adjusting variations on account of Fuel and Power Purchase Cost in the end consumer tariff, which shall come into force w.e.f. 1st April 2020 (i.e. Power Purchased by the Licensee from 1st April 2020 onwards).

1. Periodicity for recovery (Cycle)

The licensee shall compute the fuel and power procurement cost variations on a quarterly basis. The adjustment shall be made in the consumers bills starting after a month following the end of the quarter on the units billed in the months following the quarter.

For example, FPPCA for the quarter April- June shall be done in the month of July and shall be reflected in the consumer bills raised in the months of August, September and October on the units billed for the months of July, August and September respectively.

2. Chargeability

FPPCA charges shall be levied on all consumer categories excluding Below Poverty Line (BPL) and Agriculture category consumers on per unit basis on monthly/ bi-monthly consumption depending on the billing cycle.

3. Formula

The FPPCA formula shall contain the following three components:

1. Power Purchase Cost adjustments which shall contain the following elements:

- Variation in the Power Purchased from long term/ firm sources viz. CGS, IPP's, State, Own generation etc. This may consist of fixed cost, variable costs, arrears, other charges but excluding any kind of penalties
- Variation in Short-term power purchase cost through IEX, Bilateral etc. (shall be allowed upto a certain ceiling rate as may be fixed in the Tariff Order by the Commission).
- Variation on account of Deviation Settlement Mechanism – shall be allowed, but the incentive/penalty shall be excluded

2. Transmission cost adjustments which shall contain the following elements:

   - Variation on account of Central Transmission Charges including arrears/ revisions.
   - Variation on account of State Transmission charges including arrears/revisions

3. Other Charges which shall contain all the other elements not forming part of the above two components for example:

   - Any adjustments /reversals due to over recovery of charges
   - Any adjustments due to under recovery of charges in case the Commission decides to limit the FPPCA charges in previous quarters to avoid tariff shock or other reasons
   - Any other adjustments on account of factors not envisaged at the time of tariff fixation

4. Less any revenue from Additional Surcharge collected from Open Access consumer towards the stranded power purchase cost.

Based on the components as defined above, the new FPPCA formula can be represented as follows:

$$\boldsymbol{FPPCA}\left(\frac{\boldsymbol{INR}}{\boldsymbol{Unit}}\right) =.\left(\frac{(\boldsymbol{Pact} + \boldsymbol{Tact} + \boldsymbol{Oact} - \boldsymbol{ASact}) * \mathbf{10}}{\{[\boldsymbol{PPOact} * (\mathbf{1} - \boldsymbol{TLapp}) + \boldsymbol{PPIact} - \boldsymbol{PSOact}] * (\mathbf{1} - \boldsymbol{DLapp})\} - \boldsymbol{Zact}}\right) - \boldsymbol{Rapp}$$

Where:

- $Pact(in\ INR\ Cr.)$: Actual Power purchase cost inclusive of fixed cost, variable costs, arrears, and other charges excluding any kind of penalties incurred in the quarter. This shall include:
  - Cost of procurement from sources outside the State,
  - Cost of procurement from sources within the State,
  - Cost of DSM excluding any penal charges,
  - Cost of procurement from the Bilateral/ exchange etc.
  - Less: Revenue from sale of surplus power/ DSM
- $Tact\ (in\ INR\ Cr.)$: Actual Transmission cost inclusive of any kind of arrears, other charges etc. and excluding any kind of penalties incurred in the quarter. This shall include:
  - Inter-State transmission cost (PGCIL charges),
  - Intra-State transmission cost
- $Oact\ (in\ INR\ Cr.)$: Adjustments from the previous FPPCA quarter on account of over/ under recovery and any other incidental costs not accounted for at the time of retail tariff fixation
- $ASact\ (in\ INR\ Cr.)$: Revenue from Additional Surcharge collected from Open Access consumer towards the stranded power purchase cost
- $PPOact\ (in\ MU)$: Quantum of power purchased in the quarter from sources outside State/ Union Territory

- $TLapp\ (in\ \%)$: Approved Inter- State transmission losses for the year in consideration as provided in the relevant Tariff Order
- $PPIact\ \ (in\ MU)$: Quantum of power purchased in the quarter from sources within State/Union Territory, Bilateral/ Exchange and Over-drawal under the DSM
- $PSOact\ \ (in\ MU)$: Actual quantum of sale of surplus power/ under-drawal under the DSM in the quarter
- $DLapp\ (in\ \%)$: Approved T&D losses for the year in consideration as provided in the relevant Tariff Order
- $Zact\ (in\ MU)$: Actual energy sales for agriculture and BPL category consumers in the quarter

$$Rapp\ (\frac{INR}{unit}) = \left(\frac{(Papp +\ Tapp\ ) * 10}{\{[PPOapp *\ (1 - TLapp) + PPIapp - PSOapp] * (1 - DLapp)\} - Zapp}\right)$$

- $Papp\ \ (in\ INR\ Cr.)$: Total power purchase cost approved in the Tariff Order for a quarter inclusive of fixed costs, variable costs etc. and containing the following elements:
  - Cost of procurement from sources outside the State,
  - Cost of procurement from sources within the State,
  - Cost of procurement from the Bilateral/ exchange etc.
  - Less: Revenue from sale of surplus power
- $Tapp\ (in\ INR\ Cr.)$: Total transmission charges approved in the Tariff Order for a quarter consisting of the following elements:
  - Inter-State transmission charges (PGCIL charges),
  - Intra-State transmission charges
- $PPOapp\ \ (in\ MU)$: Quantum of power to be procured from sources outside State/ Union Territory in a quarter as approved in the Tariff Order
- $TLapp\ \ (in\ \%)$: Approved Inter- State transmission losses for the year in consideration as provided in the relevant Tariff Order
- $PPIapp\ \ (in\ MU)$: Quantum of power to be procured from sources within the State, bilateral/ exchange in a quarter as approved in the Tariff Order
- $DLapp\ (in\ \%)$: Approved T&D losses for the year in consideration as provided in the Tariff Order
- $PSOapp\ \ (in\ MU)$: Quantum of sale of surplus power approved in the Tariff Order for a quarter
- $Zapp\ (in\ MU)$: Sales for agriculture and BPL category consumers for a quarter as approved in the relevant Tariff Order

4. Other Terms and conditions

1. For the purpose of the Fuel and Power Purchase Cost Adjustment, the Commission suggests that all the bills admitted and credits, if any, received by the distribution licensee during the period in consideration, irrespective of the period to which they pertain, may be considered.

2. The FPPCA charges determined as per the formula above may be recovered from the consumers of all categories based on their billed units excluding the BPL and the agriculture category consumers.

3. The FPPCA charges for a quarter shall be limited to ±10% of the ABR for a consumer category. The distribution licensee shall be allowed to collect the FPPCA without obtaining approval from the

Commission. However, the distribution licensee shall be required to submit the FPPCA calculation to the Commission at least one week before levying the same on the consumers.

4. The per unit FPPCA so worked out is charged differentially as per the approved retail tariff of the consumers. The determination of differential per unit FPPCA is mentioned below:

   - Step 1: Determination of Value of K

$$\frac{Approved\ Retail\ Tariff\ for\ a\ category\ or\ sub\ category\ (\frac{INR}{unit})}{Weighted\ Average\ Retail\ Tariff\ (WART)(\frac{INR}{unit})}$$

   The value of K for different consumer category or sub-category for the year in consideration is considered as approved in this Tariff Order.

   - Step 2: Determination of proportionate FPPCA (INR /unit) consumer category/sub-category wise

$$FPPCA\ \left(\frac{INR}{Unit}\right) = Average\ FPPCA * K\ for\ that\ consumer\ category\ or\ sub - category$$

5. The Petitioner shall compute the fuel and power procurement cost variations, and adjustments shall be made in the consumer bills based on the FPPCA formula as approved by the Commission in this Order.

   For the purpose of calculation, the approved per unit cost of power purchase ($R_{approved}$) shall be taken as INR 4.92/kWh for the FY 2022-23.

Table 131: Rapproved determined by Commission for FY 2022-23

Particulars	Amount
Total Power Purchase Cost (INR Cr), P_{app}	544.15
Transmission Charges (INR Cr), T_{app}	105.79
Power Purchase Quantum from CGS Stations at Ex-Bus Periphery (NTPC, NPCIL) (MU), PPO_{app}	2132.49
Approved Weighted Average Inter-State Transmission Loss (%), TL_{app}	4.03%
Power Purchase Quantum from sources within State/ Open Market (Own Gen and Open Market) (MU), PPI_{app}	130.26
Quantum of Sale of Surplus Power (MU), PSO_{app}	492.33
Approved Intra-State T&D Loss (%), DL_{app}	8.80%
Energy Sales for LIG/BPL and Agriculture consumer category (MU), Z_{app} (MU)	1.49
R_{app} (INR/kWh)	**4.23**

9. Chapter 9: Directives

Over the years, the Commission has issued various directives to the Petitioner for necessary action at its end. It has been observed that the Petitioner is not fully complying with many of the directives issued by the Commission. In order to strengthen the effective monitoring and ensure timely implementation of all the directives in true spirit, the Commission hereby directs that the Petitioner shall now compulsorily submit:

- ***The detailed action plan for compliance of all the directives <u>within 1 month of the issuance of this Order</u>.***
- ***The quarterly progress report as per the detailed action plan for all the directives issued in the subsequent sections <u>within 10 days of the end of each quarter of the calendar year</u>.***

9.1. Directives continued in this Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it is observed that some of the directives issued in the previous Tariff Orders have not been fully complied with by the Petitioner.

The Commission is of the view that substantial time has already been given to the utility for compliance with these directions. Thus, the Commission hereby directs the utility to comply with the directions mentioned below in the given timeframe, failing which the Commission shall be constrained to take appropriate action under Section 142 of the Electricity Act 2003 and various other provisions of the Act, and Regulations framed by JERC.

9.1.1. Metering /replacement of Non-Functional or defective/ 11KV Meters

Originally Issued in Tariff Order dated 16th July 2011 *Under Section 55 (1) of Electricity Act 2003, no licensee shall supply electricity after expiry of 2 years from the appointed date except through installation of correct meter in accordance with the regulation to be made in this behalf by the authority. Accordingly, metering is required to be done in line with CEA (installation and operation of meters) Regulations 2006 to all consumers.* *Procurement process be expedited and action plan to install these meters be given by 30.09.12.*
Commission's Latest Directive in Tariff Order Dated 30th March 2021 *The Petitioner is directed to submit the action plan within one month of issuance of this order.*
Petitioner's Response in the Present Tariff Petition *The Smart Grid Project is under execution under the NSGM wherein the consumer meters under OP Sub Division No. 5 along with Feeder and DT meter shall be replaced with the Smart Meter and approximately 12293 meters (up to 30.09.2021) have already been replaced in the area under S/Divn. No.5 with smart meters.* *Further, Smart Grid project for Pan City is also sanctioned by MoP, GoI for the left-out meters (not covered under Smart Grid project for OP Sub-division No.5) for which the scope of work is under revision and the revised sanction for the project is also awaited from NSGM.* ***Action Plan:*** *The replacement of existing electronic/ defective meters with smart meters under the pilot project in Sub Division No.5 is expected to be completed by the Financial Year 2021-22 and remaining Non-Functional Or Defective/ 11KV meters shall be replaced under Pan city project*
Commission's Response *The Petitioner is directed to expedite the Smart Grid Project and submit the quarterly progress report.*

9.1.2. Energy Audit

Originally Issued in Tariff Order dated 16th July 2011 *The ED Chandigarh is directed to get an Energy Audit conducted through an accredited agency to assess actual technical and commercial losses. Based on the studies, ED Chandigarh shall proposer education of losses in subsequent years.* *The investment required to reduce the losses be included in the investment plan for augmentation of T&D system to be submitted to the Commission. Effective technical and administrative measures shall be taken to reduce the commercial losses. The action plan for energy audit and loss reduction measures shall be furnished to the Commission by 30th September, 2012*
Commission's Latest Directive in Tariff Order Dated 30th March 2021 *The Commission has noted with serious concern that the Petitioner is yet to submit the Energy Audit Reports for previous years despite repeated directions. The Commission directs the Petitioner to submit the action plan within one month of issuance of this Order and complete the Annual Energy Audit of the UT on priority*
Petitioner's Response in the Present Tariff Petition *The Energy Audit report for 2nd quarter of FY 2021-22, wherein the audit meters are installed under OP S/Division No.5 is enclosed. The Smart Grid Project is started under the NSGM wherein all the meters along with Feeder and DT meter shall be replaced with the Smart Meter and approximately 12293 meters (up to 30.09.2021) have already been replaced with smart meters and SCADA Centre is also set up for online operation and monitoring of various activities. Also, the smart meter project for whole city is in pipeline wherein all the feeder and DT meter shall be replaced with smart meters so as to enable the energy audit report.* ***Action Plan**: After the replacement of existing electronic/ defective meters with smart meters under the Smart Grid Project the Energy Audit of Electricity Wing of Engineering Department, UT, Chandigarh (EWEDC) shall be prepared.*
Commission's Response *The Commission has noted that Energy Audit report for FY2021-22 has not been submitted by the Petitioner. The Commission has further noted with serious concern that the Petitioner is yet to submit the Energy Audit Reports for previous years despite repeated directions. The Commission directs the Petitioner to submit quarterly report of the action plan within one month of issuance of this Order and complete the Annual Energy Audit of the UT on priority.*

9.1.3. Demand Side Management and Energy Conservation

Originally Issued in Tariff Order dated 16th July 2011 *Demand Side Management and Energy Conservation are very important areas, which should be in focus in ED Chandigarh particularly in context of Peak load. ED Chandigarh is directed to conduct a detailed study on demand side management and energy conservation through an external accredited agency for efficient use of electricity by various means.* *Petitioner is directed to inform the time bound action plan for installation of TOD meters*
Commission's Latest Directive in Tariff Order Dated 30th March 2021 *Through the effort undertaken by the Petitioner for compliance of this directive is appreciative, however, on-submission of quarterly report is a lapse on the part of the Petitioner, and it is expected the directives to be followed in true spirit and reports to be submitted as directed. The Petitioner is directed to expedite the process and submit the progress report on quarterly basis.*
Petitioner's Response in the Present Tariff Petition *The UJALA scheme for distribution of LED bulb, LED tube light & energy efficient fan has been launched through M/S EESL in Chandigarh on 06th March 2017. So far during FY 2020-21, 17970 LED bulb, 392 LED tube light & 711 Energy Efficient Fan have been distributed under UJALA scheme and up to FY 2020-21*

5,97,517 LED bulb, 58547 LED tube light & 16916 energy efficient fans have been distributed under UJALA scheme.

Further, 2433 LED bulbs, 66 LED tube light and 70 energy efficient fans have been distributed through this scheme during 2nd quarter of FY 2021-22 and 5098 LED bulb, 92 LED tube light and 208 energy efficient fans up to 2nd quarter FY 2021-22 have been distributed through this scheme. It is estimated that this is leading to energy savings of more than 75932 MWh of energy with monetary savings of over 29 Crore.

Moreover, a tri-party agreement was signed on 25th Sep 2020 between Bureau of Energy efficiency, Electrical Inspectorate, Administration of UT, Chandigarh (SDA) and Electricity Department Chandigarh with the aim of providing essential support to DISCOM's for implementation of DSM measures under capacity building programme of DISCOM's. This programme involves various activities including establishment of DSM cell, manpower/consultancy support, capacity building of officials of DISCOMs and implementation of DSM action plan by the DISCOMs.

Under capacity building programme M/s BEE has appointed M/s PWC as the consultant in the matter. After conducting load survey and load research, M/s PWC has submitted a DSM action plan. Now M/s PWC has been asked to submit a detailed proposal for replacement of conventional fans with energy efficient ceiling fans for consumers of domestic and commercial category so that DSM measure and energy conservation be implemented accordingly.

Commission's Response

The Commission appreciates the effort undertaken by the Petitioner for compliance of this directive. The Petitioner is directed to expedite the process and submit quarterly reports to the Commission.

9.1.4. Segregation of T&D losses and loss reduction trajectory

Originally Issued in Tariff Order dated 7th May 2012

The Petitioner is directed to furnish segregation of losses into transmission, distribution and commercial losses separately in their next petition along with a status report on energy accounting and T&D losses.

Commission's Latest Directive in Tariff Order Dated 30th March 2021

The Commission directed the Petitioner to expedite the execution of the study. The Commission also directed the Petitioner to submit a detailed report of voltage wise T&D losses along with the next Tariff Petition.

Petitioner's Response in the Present Tariff Petition

Smart Grid project is under progress wherein all the meters including the Feeder/DT meters shall be replaced with smart meters which will enable for segregation of T&D losses and its reduction trajectory. It is further mentioned that the T&D loss of EWEDC are already reducing in last few years as per Tariff Order.

Commission's Response

The Commission directs the Petitioner to expedite the Smart Grid project. The Commission also directs the Petitioner to submit a detailed report of voltage wise T&D losses along with the next Tariff Petition.

9.1.5. Assets created from consumer contribution

Originally Issued in Tariff Order dated 28th March 2018

The Petitioner has failed to submit the details of assets created through consumer contribution, if any. The Petitioner is not entitled to get depreciation on these assets. The Commission has currently considered the entire GFA towards depreciation and will reduce the depreciation in future, once the details of the consumer contribution are made available. The Commission directs the Petitioner to submit detailed scheme wise consumer contributions, the impact of which shall be accounted by the Commission in future Tariff Orders

Commission's Latest Directive in Tariff Order Dated 30th March 2021

The Petitioner, despite repeated directions has failed to submit the desired information. Every year the Petitioner submits that the compilation of information is in process. The Petitioner in this regard was directed *to submit the desired information positively along with the next Petition otherwise the Commission will consider the value based on certain assumptions which will have financial repercussions on the Petitioner's ARR.*

Petitioner's Response in the Present Tariff Petition

All the assets created from the consumer contribution are under compilation, however, the process is taking time and due to Pandemic the work could not be completed and shall take some more time. The Petitioner humbly prays to allow it the liberty to submit the same in the next tariff proceedings.

Commission's Response

The Commission considers the delay due to pandemic and directs the Petitioner to submit the desired information positively along with the next Petition.

9.1.6. Creation of SLDC

Originally Issued in Tariff Order dated 28th March 2018

Currently the functions of scheduling of power are being performed by the CED itself. The Commission directs the Petitioner to form a separate SLDC which is ring fenced from the CED. The Petitioner is directed to deploy employees dedicated to the SLDC operations, which are independent from the CED. Till the operationalization of SLDC, the Petitioner is directed to immediately appoint an officer responsible for receipt and processing of Open Access applications.

Commission's Latest Directive in Tariff Order Dated 30th March 2021

The Commission directed the Petitioner to take up the matter with topmost priority and ensure that the process of creation of SLDC be expedited with help from POSOCO and funds from PSDF.

Petitioner's Response in the Present Tariff Petition

Ministry of Power, Govt. of India had directed to privatize all the DISCOM's operational in UTs in India and the privatization work is under progress in UT Chandigarh also. Further, MoP vide its letter dated 08th October 2020 had advised that the STU and SLDC shall remain with UT Administration. The process of creation of SLDC along with organizational structure has been prepared and submitted to higher authorities for approval from the competent authority, which is under consideration and same be implemented accordingly.

Meantime, access of BBMB web based SLDC monitoring system has been made through user ID and password wherein all the incoming Nodal Points can be easily monitor by Power Controller (PC) office of U.T. Chandigarh and data of respective CGS can also be made available in prescribed format as desired by the PC U.T. Chandigarh.

Commission's Response

The Commission directs the Petitioner to expedite the process of creation of SLDC.

9.1.7. Operational safety and policy for accidents and compensation

Originally Issued in Tariff Order dated 28th March 2018

The Commission directs the Petitioner to ensure that proper safety manuals are in place and are updated on a regular basis. To check enforcement of established safety procedures, the CED is directed to ensure periodic Safety Audits through independent professional agencies and adequate training of construction supervisory staff. The Commission also directs the Petitioner to develop a compensation policy for the victims of accidents caused due to the working of the Petitioner

Commission's Latest Directive in Tariff Order Dated 30th March 2021

The Petitioner was directed to ensure suitable training to all officials as per CEA norms. Further, the Petitioner was directed to submit the training plan for the department employees for FY 2021-22 within three months of issuance of the order.

Petitioner's Response in the Present Tariff Petition

The matter for training of employees of Electricity Wing of Engineering Department, UT, Chandigarh (EWEDC) is under discussion with the PSPCL Training Institute so that the training schedule may be planned and finalized. The compliance will be submitted accordingly. However, it is pertinent to mention that as per guidelines of MOP, the EWEDC is being privatized and thus the final approval regarding budgetary allocation for conducting training of the employees of EWEDC shall be accorded by the competent authority of Chandigarh Administration in view of decision of Privatization.

Commission's Response

The Commission directs the Petitioner to secure the necessary approvals from the Chandigarh Administration and submit the training plan before the Commission within three months of issuance of the order.

9.1.8. Non-achievement of capitalization target

Originally Issued in Tariff Order dated 28th March 2018

The Commission observes that the capitalisation achieved by the Petitioner in the FY 2016-17 is much lower, almost one-tenth, than approved by the Commission in the APR Order. The Petitioner has also submitted that a capitalisation of only Rs 2.40 Cr has been achieved till January 2018 in the FY 2017-18 against a total approved capitalisation of Rs 38.52 Cr as approved by the Commission in the ARR Order. Lower capitalisation signifies that not enough efforts have been undertaken in enhancing the reliability and quality of supply to the consumers. Accordingly, the Commission directs the Petitioner to increase its efforts towards undertaking capital expenditure activities necessary for improving the service quality and targeting 24x7 supply to all consumers

Commission's Latest Directive in Tariff Order Dated 30th March 2021

The Commission directed the Petitioner to increase its efforts towards undertaking capital expenditure activities necessary to improve the service quality and target 24x7 supply to all consumers. Further, the Petitioner was directed to ensure that the capitalisation targets approved in the complete MYT Period as a whole are achieved.

Petitioner's Response in the Present Tariff Petition

It is submitted that Capitalization of Rs. 18.08 Crore for FY 2020-21 has been achieved. Further, so far Capitalization of Rs. 0.7008 Crore for 1st quarter of FY 2021-22 has been achieved.

It is further submitted that due to COVID-19 lockdown was imposed by the Govt. of India which caused halting of various major works and resulted in non-achievement of capitalization for the financial year 2020-21 and 1st quarter of FY 2021-22. However, efforts are now being made to complete all the project in time and achieve the Capitalization Target during the current financial year.

Commission's Response

The Commission directs the Petitioner to increase its efforts towards undertaking capital expenditure activities necessary to improve the service quality and target 24x7 supply to all consumers. Further, the Petitioner is directed to ensure that the capitalisation targets approved in the complete MYT Period as a whole are achieved by the end of FY 2022-23.

9.1.9. Monthly Billing for Domestic and Commercial/ Non-Residential category consumers

Originally Issued in Tariff Order dated 20th May 2019

It has been observed that despite of repeated directions of the Commission, the Petitioner has not yet moved to monthly billing from bi-monthly billing for Domestic and Commercial/ Non-Residential category consumers. The Commission takes serious note of this and directs the Petitioner to implement monthly billing for all category of consumers (except Agriculture) with immediate effect in accordance with the Supply Code Regulations, 2018 and submit the quarterly progress of the same to the Commission.

Commission's Latest Directive in Tariff Order Dated 30th March 2021

The Petitioner was directed to expedite the process and submit the action plan within one month of issuance of this order.

Petitioner's Response in the Present Tariff Petition

At present, more than 85% consumers (Domestic & Commercial) are billed on Bi-Monthly basis. The conversion of meter reading from Bi-Monthly to Monthly basis is slow due to acute shortage of staff. Further, the software is also required to be amended for Monthly billing.

***Action Plan**: The work for installation of smart meters under the NSGM is in progress, which will help for Monthly billing of all category of consumers including Domestic and Commercial category.*

Commission's Response

The Petitioner is directed to expedite the Smart Grid Pilot project and submit the progress report within one month of issuance of this order.

9.1.10. Determination of Category wise/ Voltage wise Cost of supply

Originally Issued in Tariff Order dated 20th May 2019

The Petitioner is hereby directed to submit a proposal for category wise cost of supply along with the Tariff Petition for the next year. The Petitioner in this regard is directed to start collecting category wise and voltage wise data on losses, connected load, asset allocation etc. for prudent determination of the cost of supply.

Commission's Latest Directive in Tariff Order Dated 30th March 2021

The Petitioner was again directed to expedite the process and ensure that the study/report for the same is submitted along with the next tariff petition.

Petitioner's Response in the Present Tariff Petition

The RFP for category wise cost of supply to start collecting category wise and voltage wise data on losses, connected load, assets allocation was under process. Meanwhile, the Smart Grid project under NSGM started wherein all the existing meters were to be replaced with smart meters which would help in collection of category wise and voltage wise accurate data for determination of cost of supply. Further, the work of appointment of consultant for working out category wise cost of supply to start collecting category wise and voltage wise data on losses, connected load, assets allocation is again initiated and case has been forwarded to higher authorities for accord of principal approval from competent authority and the study/report for the same shall be submitted along with the next tariff petition.

Commission's Response

The Petitioner is directed to expedite the process and ensure that the study/report for the same is submitted along with the next tariff petition.

9.1.11. kVAh based tariff

Originally Issued in Tariff Order dated 20th May 2019
The Petitioner is directed to submit a proposal for implementation of kVA/kVAh tariff for HT/EHT consumers in the tariff petition for the next year. The Petitioner is also required to submit whether it possesses the requisite infrastructure to implement the same. The Commission in its efforts of making the tariff more cost reflective is looking to implement kVA/kVAh based tariff for HT/EHT consumers for all the utilities under its jurisdiction.
Commission's Latest Directive in Tariff Order Dated 30th March 2021
The Petitioner was directed to expedite the Smart Grid Pilot project and submit the progress report within one month of issuance of this order.
Petitioner's Response in the Present Tariff Petition
The Smart Grid project in S/Divn. No.5 is under execution, wherein all the existing electronic meters under S/Divn. No.5 are being replaced with smart meters. So far 12293 smart meters (up to 30th Sep 2021) have already been installed. The SCADA centre has also been installed and various software are under testing. *Further, Smart Grid project for Pan City is also sanctioned by MoP, GoI for the left out meters (not covered under Smart Grid project for OP Sub-division No.5) for which the scope of work is under revision and the revised sanction for the project is also awaited from Ministry of Power.* *Accordingly, after installation of smart meters the kVAh based tariff will be proposed to the Commission.*
Commission's Response
The Petitioner is directed to expedite the Smart Grid Pilot project and submit the progress report within one month of issuance of this order.

9.2. New Directives

9.2.1. Hydro Purchase Obligation

In order to fulfil the HPO, the Petitioner is directed to procure power from large hydropower projects commissioned on and after 08.03.2019 and upto 31.03.2030.

10. Chapter 10: Tariff Schedule

10.1. Tariff Schedule

Table 132: Tariff Schedule

S. No.	Consumer Category	Fixed Charge INR/kW/month	Energy Charge INR/kWh
1.	**DOMESTIC SUPPLY (DS)**		
I.	**LT Domestic**		
a.	0-150 kWh per month	15.00	2.75
b.	151-400 kWh per month		4.25
c.	Above 400 kWh per month		4.65
II.	**HT Domestic**	15.00	4.30
2.	**COMMERCIAL/ NON-RESIDENTIAL (NRS)**		
I.	**LT Commercial**		
a.	0-150 kWh per month	INR. 25/kW/Month for Single Phase INR. 100/kW/Month for Three Phase	4.50
b.	151-400 kWh per month		4.70
c.	Above 400 kWh per month		5.00
II.	**HT Commercial**	100.00	4.50
3.	**INDUSTRY**		
I	Large Industrial Power Supply (LS)	200.00	4.50
II	Medium Industrial Power Supply (MS)	200.00	4.20
III	Small Industrial Power Supply (SP)	30.00	4.30
4.	**AGRICULTURAL PUMPING SUPPLY (AR)**	-	2.60
5.	**PUBLIC LIGHTING (PL)**		
I	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external agency	100.00	4.80
II	Advertisement/ Neon-sign Boards Advertisement boards, billboards (apart from advertisement boards installed on commercial establishments and charged under commercial tariff)	100.00	6.40
6.	**BULK SUPPLY (BS)**	150.00	4.20
7.	**TEMPORARY SUPPLY**	Tariff shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both.	

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		For multi activity pursuit, applicable Tariff for temporary connection shall be with reference to that of commercial category for permanent supply.	
8.	**ELECTRIC VEHICLE CHARGING STATION**	-	3.60

10.2. Applicability

Table 133: Applicability of Tariff Schedule

Applicability	Character of service
DOMESTIC SUPPLY (DS)	
LT Domestic	
This schedule shall apply for light, fan, domestic pumping sets and household appliances in the following premises: a) Single private houses/flats. b) Government schools along with related facilities. c) Supply to hostels and /or residential quarter attached with the private educational institutions where separately metered. d) Paying Guest (PG) authorized by the Chandigarh Administration e) Administrative Training Institutes/Correctional Institutes/Training Centres exclusively run/managed by the UT/State/Central Government to undertake research, consultancy/Training and allied activities to improve management efficiency f) Government and public sports institutions/Gymnasium halls etc. banks and PCOs exclusively for the use of educational institutions. g) Religious Institutions viz. Temples, Gurudwaras, Mosques, Churches, provided that the Sub Divisional officer concerned authenticates the genuineness of the place being exclusively used for worship by the general public. h) Housing colonies and multi storied flats/buildings as defined in the Electricity Supply Code Regulations, 2018 notified by JERC and as amended from time to time. i) Dispensaries / Hospitals / Public Libraries / Schools / Colleges / Working Women's Hostels / run by the Chandigarh Administration. j) Recognized Centers/ societies for the welfare of blind, deaf and dumb, spastic children, physically handicapped persons, mentally retarded persons, as approved by the Chandigarh Administration. k) Orphanages/ Cheshire Homes/ Old age homes/ charitable homes and Gaushalas. l) Charitable Organizations viz. Schools, Hospitals, Dispensaries, Education and Research Institutes and Hostels attached to such Institutions registered with the Income Tax authorities under Section 80G, or 80 GGA, or 35 AC. The individual organization shall apply in writing to the Electricity Department along with a certificate from the IT Department or getting considered for the tariff in the Domestic Category	AC, 50 cycles, Single phase 230 volts or three phase 400 volts. For loads up to 5 KW supply shall be connected on single phase 230 volts and above 5 KW up to 100 kVA supply shall be given on three phase 400 volts.

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Applicability	Character of service
m) Shelter Homes (including Night Shelters) approved by Chandigarh Administration. n) Crematoriums (including electric) and Burial Grounds. The Halls or Gardens/ Lawns or any portion of the premises listed in Para (i) above let out for consideration or used for Commercial activities at any time shall be charged at Commercial Rate of Electricity Tariff. **NOTES:** i. Where a portion of the dwelling is used for mixed load purposes the connection shall be billed for the purpose for which the tariff is higher. ii. Hostels shall be considered as one unit and billed under domestic supply tariff without compounding. iii. Private education institutions not recognized by the Chandigarh Administration shall be billed under Non Domestic Tariff. iv. STD/PCOs, shops attached to Religious Institutions will be billed under Non- Domestic Tariff. v. A room or a part of a residential house utilized by a teacher for imparting tuition work, self-occupied handicapped persons operating from their residences, cooking classes taken by house ladies, beauty parlour run by house ladies, ladies doing tailoring work etc. shall be covered under domestic tariff. vi. For cottage & commercial activities operating in residences such as repair of shoes by cobbler, dhobi, ironing of clothes, stitching/ knitting, paan-shop and bakery products etc. small shops, tea shops etc. with total load (maximum demand) of 5 kW domestic tariff shall be applicable subject to installation of MDI Meters. In cases where total load is more than 5 kW, separate metering shall be done for commercial and domestic use and consumption shall be charged according to the tariff applicable. vii. Professionals such as Doctors, Engineers, Lawyers, CAs, Journalists and Consultants practicing from their residence irrespective of location provided that such use shall not exceed 25% of the area of the premises or as specified in the rules/regulations of their respective State or Union Territory. viii. The load of common amenities for consumers of housing societies may include pumps for pumping water supply, lifts and lighting of common area. The consumption of energy for common services shall be separately metered with meters installed and sealed by the licensee and shall be billed at Domestic Tariff. The user shall inform the details of every non-domestic activity within the residential complex, such as commercial complex, industrial activity, and recreation club, along with the connected load, and shall seek a separate connection for the same under the commercial category.	
HT Domestic	
This schedule shall apply to all the consumer falling under the LT Domestic category above but connected at 11 kV or above voltage level	AC, 50 cycles, Three phase 11 Kilo volts. For loads above 100 KVA, supply shall be connected on 11 KV and a separate transformer of adequate capacity shall be

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Applicability	Character of service
	installed at consumers cost as per Electricity Supply Code Regulations, 2018 notified by JERC and as amended from time to time. In case of consumers where the metering is being done on the low voltage side of the transformer instead of the high voltage side, the consumption should be computed by adding 3% extra on account of transformation/ losses. This arrangement shall be continued for a maximum of one year within which metering shall be shifted to HT(11KV) side of the transformers
COMMERCIAL / NON RESIDENTIAL SUPPLY (NRS)	
LT Commercial	
This schedule shall apply to all consumers, using electrical energy for light, fans appliances like pumping sets, central air conditioning plant, lift ,welding set, small lathe, electric drill, heater, battery charger, embroidery machine, printing press, ice candy, dry cleaning machines, power press, small motors in non-residential premises such as defined below: a) Hostels (other than those recognized/aided institutions of Chandigarh Administration) b) Schools and colleges (excluding Government schools and related facilities c) Coaching institutes and research institutes (Other than those recognized by the Chandigarh Administration) d) Auditoriums, Hospitals, clinics, dispensaries, nursing homes / diagnostic centers other than those run by the Chandigarh Administration. e) Railways (other than traction) f) Hotels, restaurants, guest houses, boarding / lodging houses, marriage houses g) Cinemas h) Banks i) Petrol pumps. j) Government / Public Sector offices and undertakings k) Public halls, auditoriums, exhibitions, theatres, circus, cinemas etc. l) All other establishments, i.e., shops, chemists, tailors, washing, dyeing etc. which do not come under the Factories Act. m) Cattle farms, fisheries, piggeries, poultry farms, floriculture, horticulture, plant nursery Farm houses being used for commercial activity. n) Ice-cream parlors, bars, coffee houses etc. o) Any other category of commercial consumers not specified/covered in any other category in this Schedule.	AC, 50 cycles, single phase at 230 Volts or 3 Phase at 400 Volts For loads up to 5 KW, supply shall be connected on single phase 230 volts and above 5 KW up to 100 KVA, supply shall be given on 3 phase 400 volts.

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Applicability	Character of service
NRS supply shall also be applicable to multi consumer complexes including commercial complexes as defined in the Electricity Supply Code Regulations, 2018 notified by JERC and as amended from time to time. No separate circuit/connection for power load including pumping set/central air conditioning plant, lifts etc. is permitted.	
HT Commercial	AC, 50 cycles, Three phase 11 Kilo volts.
This schedule shall apply to all the consumers falling under the LT Commercial category above but connected at 11 kV or above voltage level	For loads above 100 KVA, supply shall be given on 11 KV in case of multi consumer complex including commercial complex and in other cases for load above 100 KVA the supply shall be on 11 KV. In case of consumers where metering is done on the low voltage side of the transformer instead of the high voltage side, the consumption should be computed by adding 3% extra on account of transformation losses.
LARGE INDUSTRIAL POWER SUPPLY (LS)	
The schedule shall apply for consumers having industrial connected load above 100kVA.Their contract demand shall not be less than 100 kVA. No consumers shall increase their connected load without prior approval of the Electricity department. The consumer availing supply at high tension shall indicate rated capacity of all the step down transformers installed in his premises and shall not increase the capacity of such step down transformers without prior approval of the department. **NOTE** i. The above tariff covers supply at 11 kV. Surcharge at 20% on the tariff shall be leviable for all the existing consumers which are being given supply at 400 volts. A consumer getting supply at 33 kV and above will get a rebate of 3%. ii. Surcharge @ 17.5% on the tariff shall be leviable for all the arc furnace consumers which are being given supply at 11 kV. This surcharge at 17.5% shall also be leviable on other industrial consumers having contract demand exceeding 5000 kVA and running at 11kV. iii. In case of steel rolling mills having supply at 400 volts, an additional surcharge of 5% shall be leviable. iv. In case of HT consumers (11kV and above) where maximum demand and energy consumption is recorded on the lower voltage side of the consumer transformer instead of the high voltage side, maximum demand and energy consumption for billing purpose should be computed by adding 3% extra on units on account of transformation/cables losses. However, this agreement shall in no case continue for more than three months and the meter shall be installed on the HT side of the transformer within the said period including such existing connection.	AC, 50 Cycles, 3 phase 11 kV supply for loads above 100 kVA Supply can be given at 33/66/220kV depending on quantum/type of load and contract demand and availability of bus voltage and transformer winding capacity at the feeding substation wherever possible at the discretion of supplier. For arc furnace loads and other loads of equally violent fluctuating nature, voltage of supply will be 33kV and above depending upon availability of bus voltage and transformer winding capacity at the feeding substation wherever possible, at the discretion of supplier. **Contract demand** is the load kW, kVA or HP, as the case may be agreed to be supplied by the licenses and contracted by the consumer and specified in the

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Applicability	Character of service
v. For new connections, all metering will be on HT side only.	agreement. If the consumer in a month exceeds the contract demand, such excess shall be charged at an additional rate of INR 250/kVA.
MEDIUM INDUSTRIAL POWER SUPPLY (MS)	
This tariff schedule shall apply to all industrial power supply consumers having connected load ranging from 21 kVA to 100 kVA	AC, 50 cycles, 3 phase, 400 volts
SMALL INDUSTRIAL POWER SUPPLY (SP)	
This schedule shall apply to small power industries with connected load not exceeding 20 KW (26BHP) in urban and rural areas	AC, 50 cycles, single phase 230 volts, or 3 phase, 400 volts.
AGRICULTURAL PUMPING SUPPLY (AP)	
This schedule shall apply to all consumers for use of electrical energy for irrigation pumping load upto 20 kW (26 BHP). Supply for loads above 26 BHP/20 KW shall be charged in accordance with the relevant industrial tariff (Govt. Tubewells meant for water supply are covered under the relevant Industrial Tariff) **NOTE** • Pumping sets shall be ISI marked. The responsibility for ensuring installation of ISI marked pumping sets as well as shunt capacitors shall be that of the Junior Engineer concerned, who shall verify the same at the time of verification of test reports before the release of the connection. • Supply for agriculture/Irrigation pump sets, at one point, may also be given to a registered co-operative society or to a group of farmers recognized by the competent authority. • An agriculture consumer, if he so desires, may shift the location within his premises of his connection, with the approval of the competent authority, after payment of applicable charges.	AC, 50 Cycles, three phase, 400 volts, Single Phase at 230 volts.
PUBLIC LIGHTING (PL)	
This tariff schedule shall apply for use of Public Lighting system including signaling system, road and park lighting managed by municipal corporation, panchayats, institutions(at the discretion of the supplier)etc. The tariff schedule shall also apply for use of electricity by street lights managed/outsourced to an external agency and advertisement boards, sign boards, bill boards, signages etc., (apart from the advertisement boards installed on commercial establishments & charged under commercial tariff).	AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts.
BULK SUPPLY (BS)	
This tariff schedule shall apply to general or mixed loads exceeding 10 kW to MES, Defense establishments, Railways, Central PWD, Institutions, Hospitals, Departmental Colonies and other similar establishments where further distribution is to be done by the consumer. Above schedule shall not be applicable, if 50 % or more of the total sanctioned load is motive/ manufacturing load	AC, 50 cycles, three phase, 400 volts or 11 kV or higher voltage at the option of the department. Loads exceeding 100 kVA shall be released on HT only.
TEMPORARY SUPPLY	
Available to any person requiring power supply for a purpose temporary in nature. The Temporary Tariff is applicable for a temporary period of supply for a period of maximum one (1) year at a time, which may be	AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts

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Applicability	Character of service
further extended, as per the provisions of Supply Code Regulations, 2018 notified by JERC and as amended from time to time.	
ELECTRIC VEHICLE CHARGING STATIONS	
This tariff schedule shall apply to consumers that have set up Public Charging Stations (PCS) in accordance with the technical norms/ standards/specifications laid down by the Ministry of Power, GoI and Central Electricity Authority (CEA) from time to time. The tariff for domestic consumption shall be applicable for domestic charging (LT/HT)	AC, 50 cycles, three phase, 11 kV or higher voltage.

10.3. General Conditions of HT and LT Supply

The above mentioned LT/HT Tariffs are subjected to the following conditions, applicable to all category of consumers.

1) The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.

2) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.

3) If energy supplied for a specific purpose under a particular tariff is used for a different purpose, not contemplated in the contract for supply and / or for which higher tariff is applicable, it will be deemed as unauthorized use of electricity and shall be dealt with for assessment under the provisions of section 126 of the Electricity Act, 2003 & Supply Code Regulations, 2018 notified by JERC and as amended from time to time.

4) Fixed charges, as applicable, will be charged on pro-rata basis from the date of release of connection.

5) The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 85% of the contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulations, 2018 notified by JERC and as amended from time to time. If such over-drawl is more than 20% of the contract demand then the connection shall be disconnected immediately.

   Explanation: Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12000 kWh, then the consumption corresponding to the contract demand will be 10000 kWh (12000*100/120) and consumption corresponding to the excess demand will be 2000 kWh. This excess demand of 20 KVA and excess consumption of 2000 kWh will be billed at twice the respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected immediately.

6) **Power Factor Charges for HT and EHT**

   (a) Power factor means, the average monthly power factor and shall be the ratio expressed as percentage of total kWh to total kVAh supplied during the month. The ratio shall be rounded up to two figures.

   (b) The consumer shall maintain the monthly average power factor of the supply not less than 90% (lagging). If the monthly average power factor of (a) consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 1% in power factor upto 70%(lagging).

   (c) In case the monthly average power factor of the consumer is more than 95% (95% lagging), a power factor incentive @ 1% on demand and energy charges shall be given for each increase of 1% in power factor above 95% (lagging)

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(d) If the average power factor falls below 70% (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.

7) Delayed payment surcharge shall be applicable to all categories of consumers. Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amounts less than 50 paisa shall be ignored and amounts of 50 paisa or more shall be rounded off to the next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.

8) **Advance Payment Rebate**: If full advance payment of the current bill is made before the issue date of previous cycle bill, rebate @1% shall be given on the amount consisting of SOP plus fixed charges plus FPPCA. However, if the advance payment is not adequate as per current bill amount consisting of SOP plus Fixed Charges plus FPPCA or payment made after the issue date of previous cycle bill , such cases shall be treated for prompt payment rebate. Sample calculation for the same has been in Annexure 2 of this Order.

9) **Prompt Payment Rebate:** If payment is made at least 7-days in advance of the due date of payment of the current bill a rebate for prompt payment @ 0.25 % of the bill amount (SOP +Fixed Charges +FPPCA) amount shall be given. Those consumers having arrears shall not be entitled for such rebate. Sample calculation for the same has been in Annexure 2 of this Order.

Provided that in case the payment is made by cheque, the prompt payment discount will be applicable only if the payment by cheque is made 3 days prior to date of availing the prompt payment discount i.e. before 10 days from the due date of payment.

10) The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with the FPPCA formula specified in Chapter 8 of this Tariff Order. Such charges shall be recovered / refunded/adjusted in accordance with the terms and conditions specified in the FPPCA mechanism. However, no FPPCA shall be recovered from the consumers from 1st April 2021 onwards till further orders of the Commission.

11) The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order.

12) **Surcharge for Low Power Factor/Non Installation of Required rated LT Shunt Capacitors**

(a) Consumers with L.T connections where the meter provided by the licensee has the power factor recording feature, shall install shunt capacitors of adequate rating to ensure power factor of 85% or above failing which low power factor surcharge at the rates noted below will be levied.

Table 134: PF Range for LT consumer

S. No.	Power Factor range	Surcharge
1.	85% and above	NIL
2.	Below 85% and upto 80%	2% of billed energy charges of that month for every 1% fall in P.F from 85%
3.	Below 80% and upto 75%	2.5% of billed energy charges of the month for every 1% fall in P.F from 80%
4.	Below 75%	3% of billed energy charges of that month for every 1% fall in P.F from 75%

The conditions for disconnection of a consumer supply in case of non-achievement of minimum level of power factor as prescribed in the Supply Code Regulations, 2018 notified by JERC and as amended from time to time, shall apply.

13) **Unauthorized use of Electricity:** The unauthorized use of electricity shall be treated as specified in the Supply Code Regulations, 2018 notified by JERC and as amended from time to time. The penalty

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applicable shall continue unless the unauthorized use is stopped.

14) **Taxes and duties**

The tariff does not include any tax or duty etc. on electricity energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall be payable by the consumer in addition to the tariff charges.

15) **Time of Day (TOD) tariff**

a) Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.

b) The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer, as TOD metering is not yet implemented.

Table 135: Applicability of ToD Charges

Period of use	Hrs.	Demand Charges	Energy Charges
Normal period	6:00 a.m. to 6:00 p.m.	Normal Rate	Normal rate of energy charges
Evening peak load period	6:00 p.m. to 10.00 p.m.	Normal Rate	120% of Normal rate of energy charges
Off-peak load period	10:00 p.m. to 6:00 a.m.	Normal Rate	90% of Normal rate of energy charges

Applicability and Terms and Conditions of TOD tariff:

a) TOD tariff shall be **optional** unless otherwise specifically stated to the contrary in the Tariff Order.

b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power.

c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.

d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.

10.4. Schedule of Other Charges

Table 136: Schedule of Other Charges

S. No.	Description	Approved
A	**Application processing charges for new connection/ enhancement of load/ reduction of load**	
i	Domestic supply (LT)	INR 25/-
ii	Non-Domestic Supply (LT)	INR 100/-
iii	Small Power, Medium Supply and street lighting supply (LT)	INR 250/-
iv	Agriculture Power supply (LT)	INR 25/-
v	Temporary metered supply (LT)	Two times the normal rates of category of permanent supply
vi	HT/EHT Supply	As specified in Supply Code Regulations specified by JERC
B	**Charges for Re-fixing/ Changing of meter/Meter Board in the same premise on consumer request when no additional material is required. (When the cause leading to subsequent change/replacement of meter is either manufacturing defect or Department's fault then, it shall be free of cost and further, if shifting of meter is done in the interest of department work then it is free of cost.)**	

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S. No.	Description	Approved
i	Single Phase Meter	INR 250/- per meter
ii	Three Phase Meter without CT	INR 500/- per meter
iii	Three Phase Meter (with CTs & PTs)	INR 1,000/- per meter
iv	Tri-vector and special type meters	INR 1,200/- per meter
v	HT/ EHV metering equipment	INR 3,000/- per meter
C	**Meter Inspection & Testing Charges**	
	(In case correctness/accuracy of a meter belonging to the Licensee is challenged by the consumer)	
i	Single phase	INR 150/- per meter
ii	3-phase whole current i.e. without C.T	INR 500/- per meter
iii	L.T. meter with CTs	INR 1,500/- per meter
iv	H.T. & E.H.F metering equipment.	INR 3,000/- per meter
	NOTE: If the challenged meter is found to be incorrect / defective, the credit of these charges will be given to the consumer, otherwise these will be forfeited.	
D	**Re-sealing charges (irrespective of the number of seals involved against each item below and where seals found to have been broken by the consumer):**	
i	Meter cupboard	INR 50/-
ii	Where cut-out is independently sealed	INR 50/-
iii	Meter cover or Meter Terminal cover (Single phase)	INR 150/-
iv	Meter cover or Meter Terminal cover (3- phase)	INR 375/-
v	Maximum Demand Indicator or C.T.s Chamber	INR 900/-
vi	Potential fuses	INR 900/-
	Note: If M&T and ME seals are found to be broken/tampered cost of meter shall be recoverable and the case shall be treated as theft case.	
E	**Reconnection Charges**	
A	Reconnecting/connecting the premises of any consumer who was previously disconnected on account of breach of his agreement with the department or of any other provisions of the Act as may be relevant.	
i	Domestic supply	INR 250/-
ii	Non-Domestic Supply	INR 500/-
iii	Small Power, Medium Supply and street lighting supply	INR 500/-
iv	Large Supply and bulk supply	INR 1000/-
v	Agriculture Power supply	INR 250/-
vi	Temporary metered supply	INR 1,500/-
F	**Testing/ Inspection of Consumer's installation**	
A	Initial Test/ Inspection	Free of Cost.
B	For subsequent test of a new installation or an extension to an existing installation if the installation is found to be defective or the wiring contractor or his representative fails to be present	
i	Single Phase	INR 150/-

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S. No.	Description	Approved
		(Payable in advance for each subsequent visit for the purpose of testing the installation.)
ii	Three Phase	INR 200/- (Payable in advance for each subsequent visit for the purpose of testing the installation)
iii	Medium Supply/Bulk Supply loads upto 100 kVA	INR 500/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
iv	Large Supply/Bulk Supply (loads above 100 kVA)	INR 1,000/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
G	**Meter Reading Cards/ Passbook (New/ Replacement)**	
i	Provision of meter reading cards including PVC jacket	INR 5/- per card
ii	Replacement of meter card found to be missing on consumer's premises	
iii	Domestic & NRS	INR 5/- per card
iv	SP and AP	INR 10/- per card
v	MS	INR 25/- per card
vi	LS	INR 45/- per card
vii	Replacement of Passbook in case it is lost by AP Consumer	INR 60/- each
viii	Replacement of identification card missing on the premises of AP Consumer	INR 25/- each
ix	Temporary	INR 60/- per card
H	**Meter Rentals** (In case where consumer opts that licensee should supply meter)	
i	Single Phase meter	INR 20/- per month
ii	Three Phase LT meter	INR 50/- per month
iii	Three Phase LT meter with CT	INR 70/- per month
iv	11 kV Metering System	INR 500/- per month
v	33 kV Metering System	INR 1,000/- per month
vi	66 kV Metering System	INR 2,000/- per month
I	**Replacement of broken glass**	
a	Replacement of broken glass of meter cupboard (when the cause of the breakage is considered to be an act or fault of the consumer).	INR 60/- each
b	Replacement of meter glass where the same has been tampered with or broken by the consumer	
i	Single phase meter	INR 250/-
ii	Three phase meter	INR 450/-
J	**Amount of Security deposit for new/ extension of load**	**As per the procedure prescribed in clause 5.130 to clause 5.134 of JERC Electricity Supply Code Regulation 2018.**

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S. No.	Description	Approved
K	**Charges recoverable from the consumer when the meter is found damaged / burnt owing to negligence or default on the part of consumer**	
i	Single Phase Meter	INR 700/- each
ii	Three Phase Meter	INR 1,550/- each
iii	LT CT operated Solid State Meter. (Without CTs)	INR.3,000/- each
iv	LT CTs	
	a) Upto 50/5A	INR.1,580/- each
	b) Above 50/5 A	INR. 600/- each
	c) Solid State HT TPT metering equipment (without CT/PT unit)	INR.20,000/- each
	d) H.T.C.T./P.T. Unit	INR. 40,470/-
L	**Special Meter reading charges in case of change in occupancy/ vacation of premises**	
i	Domestic	INR. 50/-
ii	Other Consumer-Single phase meter	INR 250/-
iii	Other Consumer-Three phase meter	INR 450/-
M	**Supply of duplicate copies of electricity bills**	
i	Domestic consumers	INR 5/-
ii	Non-Domestic consumers	INR 10/-
iii	Temporary consumers	INR 10/-
iv	L.T. Industrial (upto 20 kW) & AP consumer	INR 10/-
v	L.T. Industrial (above 20 kW) & Street lighting consumer	INR 15/-
vi	H.T. Industrial & bulk supply consumer	INR 20/-
N	**Review of electricity bills (If the accuracy of licensee's bill is challenged by the consumer and a review of the bills is demanded)**	
i	Single Phase Supply	INR 10/-
ii	Three Phase Supply	
	load upto 20 kW	INR 250/-
	load above 20 kW upto 60 kW	INR 450/-
	load above 60 kW upto 100 kVA	INR 750/-
iii	Large Supply (above 100 kVA)	INR 1,000/-
	NOTE: If the challenged bill is found to be incorrect, the credit of the fee will be given to the consumer, otherwise these will be forfeited.	
O	**Testing and calibration including sealing of energy meter owned /supplied by the consumer**	
i	Single Phase	INR 100/-
ii	Polyphase whole current meter	INR 500/-
iii	Polyphase meters with CTs	INR 1200/-
iv	HT and EHT metering equipment	INR 3,500/-
P	**Checking of the capacitors at the request of the consumer**	
i	Consumer receiving supply at 230/440 V	INR 250/- per visit

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S. No.	Description	Approved
ii	Consumer receiving supply at Above 400 V and up to 11 KV	INR 500/- per visit
Q	**Demand notice extension fee (for each period of three months)**	
i	DS and NRS	INR 50/-
ii	AP	INR 500/-
iii	SP	INR 200/-
iv	MS/LS/BS	INR 2,500/-
	Note: Demand notice shall be valid for two months initially with an extended/grace period of further three months. After the expiry of grace/extended period of three months, the application shall be deemed as cancelled. Revival fee (one time only) for cancelled application shall be twice the demand notice extension fee as prescribed above and will be done by load sanctioning authority for another three months only	

10.5. Schedule for service connection charges and service rentals

Service connection charges are provided in the schedule of general and service connection charges and are to be recovered from all prospective consumers and existing consumers seeking extension in load. These charges won't be payable by consumers who have got the works executed at their own expense. Schedule of service connection charges as applicable is given under:

A. Service connection charges for domestic supply

Table 137: Service Connection Charges

S. No	Particulars	Category	INR
1	Single Phase Fixed Per kW Charges		
A	Up to 1 kW	Domestic	250/-
		Non Residential Supply	250/-
B	Above 1 kW and up to 3 kW	Domestic	300/-
		Non Residential Supply	300/-
C	Above 3 kW and 5 kW	Domestic	500/-
		Non Residential Supply	750/-
2	Three Phase Fixed Per kW Charges		
A	Above 5 kW	Domestic	750/-
		Non Residential Supply	1,000/-

B. Variable Charges

No variable charges are leviable upto 75 meters of service line length from the point of interconnection. Beyond 75 meters for all loads variable charges @ INR 125 per meter length of service line shall be recoverable for loads in excess of 5 kW.

a) Domestic and Non Residential consumers falling under the following categories have the option, either to pay in lump sum the service connection charge as mentioned in the preceding clause or to pay monthly service rentals at 1.6 paisa per rupee of the estimated cost of the service line beyond the cost of 30.48 meters.

(i) Members of Schedule Castes.

(ii) Religious and Charitable institutions run by recognized/ registered associations or societies

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registered with Register of Societies

b) All such prospective and existing consumers who will pay or have paid service connection charges in full, shall be exempted from the payment of monthly service rentals.

c) The service rentals to the consumers existing prior to 1st November 2002, if applicable already shall continue.

C. Service connection charges for industrial and bulk Supply (For new Connections):

Table 138: Service Connection Charges for Industrial and Bulk Load Supply

S. No	Load	Service Connection
1	Up to 100 kVA	INR 750/kW

Service connection charges under Para i) shall be applicable for loads upto 100 KVA where the length of new and augmented or both line(s) to be provided is up to 100 meters which will include 11kV line (whether overhead or cable LT line and service cable. Where this limit exceeds 100 meters, the applicant shall be required to pay the actual cost of @ INR 125 per meter of 11 kV line, LT line and service cable in excess of 100 meters as additional service connection charges (nonrefundable).However, no component of the distribution substation transformer to be created would be charged wherever applicable.

Extension of Load

a) **Where the consumer is either paying service rentals or had paid the service connection charges on kW basis for the original load.**

i) Extension in load bringing to be charged at INR 750/- per the total load up to 100 kVA for extension part only. However, charges for service line in excess of 100 meters shall be charged @ INR 125 per meter for length of service line (new or augmented or both) feeding such consumer. Rentals on original load, if applicable, already shall continue.

b) **Where the consumers had paid the service connection charge in full.**

i) No charges for extension shall be recoverable where the cost of service/common part of service line had been paid by the applicant at the time of release of the original connection provided. No augmentation of service/common portion of service lines had been carried out ever since the release of connection and also the additional load can be released from the existing line without augmentation and the cost deposited by the consumer at the time of release of original connection is not less than 'per kW charges' payable on the basis of total connected load (including extension in load). For calculating per kW charges, the rate as applicable at the time of release of original connection shall apply for the existing load and prevailing rates for the extension in load. Difference, if any, between the actual cost paid and the recoverable amount 'per KW charges' shall be payable by such consumers at the time of extension in load. This shall also apply to the cases fed through an independent feeder laid at the cost of the consumer. The cost of line/bay (33/66/132/220kV) paid by the consumer or at the time of clubbing/conversion paid by the consumer at the time of clubbing of supply to higher voltage shall be appropriated towards service connection charges at the time of subsequent release of extension in load, if applicable. However, for calculating total 'per kW charges' service connection charges already recovered from the consumer in respect of clubbing cases, applicable rates to different connections as existing immediately prior to clubbing are to be taken into account.

Cases involving augmentation of service/Common portion of service line or if the augmentation had taken place subsequent to release of connection shall be default with as per provisions of sub Para (a)

c) While accessing the connected load for working out service connection charges, both general and industrial loads of an individual consumer at one location shall be taken into account.

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d) The "per kW", service charges for extension in load shall be as contained in above and those shall be in addition to the service rentals on the original load, if applicable thereon.

e) An increase in the connected load even without increase in the contract demand shall call for payment of service connection charges on "per kW" basis as applicable to the category in which total connected load after extension falls and shall be recoverable for extension of the electrical part only. Consumers seeking extension in contract demand within the sanctioned connected load shall not be required to pay service connection charges on KW basis.

f) Consumers seeking contract demand higher than 60% of the connected load, shall be charged one time charge termed 'Contract Demand Charges' as follows :

Table 139: Charges applicable for contract demand higher than 60% of connected load

S. No	Particulars	INR/kVA
1	For Contract Demand above 60% and up to 80% of connected load	200/-
2	For Contract Demand above 80% and up to 100% of connected load	300/-
3	Large Supply Consumers getting at 33 kV and above are exempted from the payment of one time contract demand charges for purpose of increasing contract demand	

g) In case of LT connections, Service rentals to the consumer existing prior to 1-11- 2002, if applicable already shall continue.

D. Recovery of service connection charges for extension of load by consumers who had paid the full cost of the line

Industrial and Bulk supply consumers availing connection for load exceeding 1 MW have to pay the entire cost of service line laid for them. By virtue of paying the entire cost of the line involved in releasing the connection, the consumer is entitled to avail (within five years) extension in load upto 100% of the original line for which the line had been erected provided that line so erected is capable of carrying the load i.e. original load and extended load up to 100% of the original load. If, however, line already erected is unable to take 100% extension of load, extension in load shall be limited to the capacity of the line. In such an event, the consumer is not required to pay service connection charges for the extension in load, provided the cost of the line already provided by him is more than the per kW charges calculated at the applicable rate from time to time on the total load including extension in load applied by the consumer.

a) If the extension in load applied by the consumer is in excess of the capacity of line already erected or more than 100 % of the original load, consumer shall pay the service connection charges as applicable to the new applicants.

b) If during the period of 5 years from the date of connection some load has already been released from the line, whose entire cost has been paid by the consumer, who seeks extension in load within five years up to the extent of the capacity of the line or 100% of the original load within 5 years up to the extent of the capacity of the line or 100 % of the original load, whichever is lesser, release of additional load shall be regulated as under:

Load released on voltage above 11 kV and loads 1MW and above:

Extension in load to the original consumer shall be allowed (within the contract demand for which the line was originally erected for the said consumer) at the cost of the electricity department, even if augmentation/ erection of new lines are required.

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Load less than 1MW released on 11 kV

In this case care should be taken for a period of 5 years that a margin of 100 % of the load of the original consumer is available in the capacity of the line. If other consumer(s) want connection(s) to be released by utilizing the available margin, new consumer(s) singly or jointly, as the case may be shall pay towards the cost of augmentation of the line so that sufficient margin in electricity carrying capacity is available to cater to the additional requirement of the original consumer.

a) Provisions of the preceding Para's of this schedule shall not be applicable where as a result of extension in load the supply voltage level of the consumer changes or when the consumer changes the site of the premises.

E. Service connection charges for agriculture power

All prospective tube well consumers covered under general category shall pay INR 3,000 per BHP as service connection charges. The above charges are recoverable where the total length of the service line including new 11 kV line, LT line (new/augmented) and service cable is upto 1 Km (out of which LT line/Service cable route length should not exceed 500 meters from the common pole).Where the total length of the service line is more than 1 km (out of which LT line/Service cable route length should not exceed 500 meters), any applicant under this category shall be required to pay the cost of the new 11 kV line beyond this limit at INR 125 per meter as additional service connection charges. However, no component of distribution substation/transmission cost would be charged.

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Annexures

Annexure 1: List of Stakeholders

The following is the list of the participants in Public Hearings conducted on 13th May 2022:

Table 140: List of participants in Public Hearing

S. No.	Name of Person (Mr./Ms.)	Organization/ Address
1	Indian Citizen's Forum	Plot No.134, Industrial Area, phase-II, Cha ndigarh-160002.
2	Dr. Navneet Singh	PGIMER, Sector-12, Chandigarh- 1600112
3	Group Captain R.C.Goyal	Kothi No.1579, Sector 36D, Chandigarh-160036
4	Gopal Dutt Joshi	U.T. Powermen Union, Chandigarh
5	Shri. Jeetram Vaid	Social Welfare Residential Society, mani majra, Chandigarh