

**BEFORE**

**JOINT ELECTRICITY REGULATORY COMMISSION**

**FOR THE STATE OF GOA AND UNION TERRITORIES**

**GURUGRAM**



**PETITION**

**FOR**

**APPROVAL OF**

**TRUE-UP OF FY 2022-23, ANNUAL PERFORMANCE REVIEW OF FY 2023-24,**

**AGGREGATE REVENUE REQUIREMENT FOR FY 2024-25, AND TARIFF PROPOSAL FOR FY**

**2024-25**

**BY**



**ELECTRICITY DEPARTMENT**  
*Government of GOA*

**NOVEMBER 2023**

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**BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA &  
UNION TERRITORIES, GURUGRAM**

Filing No.....

Case No.....

IN THE MATTER OF:     Petition for approval of True-up of FY 2022-23, APR of FY 2023-24,  
ARR for FY 2024-25, and Tariff Proposal for FY 2024-25.

AND

IN THE MATTER OF:     Electricity Department, Government of Goa,  
  
Vidyut Bhavan, Panaji, Goa



.....Petitioner

Electricity Department, Government of Goa (hereinafter referred to as "EDG"), files petition for approval of True-up of FY 2022-23, APR of FY 2023-24, ARR for FY 2024-25, and Tariff Proposal for FY 2024-25 for the Electricity Department of Goa under Sections 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003 (EA 2003).

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AND

IN THE MATTER OF: Electricity Department, Government of Goa  
Vidyut Bhavan, Panaji, Goa

.....Petitioner



**AFFIDAVIT VERIFYING THE PETITION**

I, Shri. Stephen Fernandes, son of Shri. Roque Fernandes aged 45 years, the deponent named above do hereby solemnly affirm and state on oath as under:

1. That I am Chief Electrical Engineer and Head of Electricity Department, Government of Goa and am authorised to sign and submit the said petition and am acquainted with the facts deposed to below.
2. I say that on behalf of EDG, I am now filing this Petition under the Electricity Act, 2003, Petition for approval of True-up of FY 2022-23, APR of FY 2023-24, ARR for FY 2024-25, and Tariff Proposal for FY 2024-25.

3. I further say that the statements made, and financial data presented in the aforesaid Petition are as per records of the Department and believe that to be true to the best of my knowledge.
4. Further, to my knowledge and belief, no material information has been concealed in the aforesaid Petition.



The Electricity Department,  
Government of Goa

DEPONENT

Place: Panaji, Goa

Dated: 30<sup>th</sup> November 2023

#### VERIFICATION

I, Shri Shivprasad Vassader Manerker Advocate and Notary having office at Panaji-Goa, do hereby declare that the person making this affidavit is known to me through the perusal of records and I am satisfied that he is the same person alleging to be deponent himself.

Advocate

Solemnly affirmed before me on this 30<sup>th</sup> day of November 2023 by the deponent who has been identified by the aforesaid Advocate. I have satisfied myself by examining the

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deponent that he understood the contents of the affidavit which has been read over and explained to him. He has also been explained about Section 193 of Indian Penal Code that whoever intentionally gives false evidence in any of the proceedings of the Commission or fabricates evidence for purpose of being used in any of the proceedings shall be liable for punishment as per law.



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**BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA &  
UNION TERRITORIES, GURUGRAM**

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Case No.....

IN THE MATTER OF: Petition for approval of True-up of FY 2022-23, APR of FY 2023-24,  
ARR for FY 2024-25, and Tariff Proposal for FY 2024-25.

AND

IN THE MATTER OF: Electricity Department, Government of Goa

Vidyut Bhavan, Panaji, Goa

.....Petitioner

PETITIONER, UNDER SECTIONS 45, 46, 61, 62 AND 64 OF THE ELECTRICITY ACT, 2003 FILES  
FOR INITIATION OF PROCEEDINGS BY THE HON'BLE COMMISSION FOR DECIDING ON THE  
MATTERS CONCERNING THE PETITION FOR APPROVAL OF TRUE-UP OF FY 2022-23, APR  
OF FY 2023-24, ARR FOR FY 2024-25, AND TARIFF PROPOSAL FOR FY 2024-25.

**The Petitioner respectfully submits as under: -**

- The Petitioner, Electricity Department – Goa (EDG) is a deemed Distribution Licensee for the State of Goa.
- Pursuant to the enactment of the Electricity Act, 2003, EDG is required to submit its Annual Revenue Requirement and Tariff Petition as per the procedures outlined in Sections 61, 62 & 64 of EA 2003, and in accordance with the provisions of JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 (MYT Regulations, 2021)

- 
- EDG hereby submits the present Petition for approval of True-up of FY 2022-23, APR of FY 2023-24, ARR for FY 2024-25, and Tariff Proposal for FY 2024-25 based on the principles outlined in the MYT Regulations, 2021 notified by the Hon'ble Commission.
  - EDG hereby submits the Tariff Formats for the True-up of FY 2022-23, APR of FY 2023-24, ARR for FY 2024-25 is attached in **Annexure-1**.
  - EDG hereby submits that the documents of Budgetary Support assurance from the Government of Goa for FY 2022-23 & FY 2023-24 have been submitted as **Annexure-2** of this Petition and the same for FY 2024-25 shall be submitted after its issuance by Government of Goa.
  - EDG prays to the Hon'ble Commission to admit the attached petition for approval of True-up of FY 2022-23, APR of FY 2023-24, ARR for FY 2024-25, and Tariff Proposal for FY 2024-25.

**Prayers to the Hon'ble Commission:**

- A. The Petition provides, inter-alia, EDG's approach for formulating the present Petition, the broad basis for projections used, performance of EDG in the recent past, and certain issues impacting the performance of EDG in the Licensed Area.
- B. Formulating True Up exercise for FY 2022-23, APR for FY 2023-24, and Aggregate Revenue Requirement for FY 2024-25, based on the principles specified in JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 and the parameters approved in the prior JERC Tariff Orders.
- C. In order to align the thoughts and principles behind the True-up, ARR and Tariff Petition, EDG respectfully seeks an opportunity to present its case prior to the finalization of the Tariff Order. EDG believes that such an approach would go a long way towards providing a fair treatment to all the stakeholders and may eliminate the need for a review or clarification.

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**The Petitioner respectfully prays that the Hon'ble Commission may:**

- Accept and admit the Petition for approval of True-up of FY 2022-23, APR of FY 2023-24, ARR for FY 2024-25, and Tariff Proposal for FY 2024-25, which is in line with the principles laid by the Hon'ble Commission contained in MYT Regulations, 2021.
- Accept and admit the Tariff Formats attached in **Annexure-1** of this petition for the True-up of FY 2022-23, APR of FY 2023-24, ARR for FY 2024-25.
- Approve the total recovery and revenue gap for Final True-up of FY 2022-23, Annual Performance Review of FY 2023-24, ARR for FY 2024-25, and Tariff Proposal for FY 2024-25 and other claims as proposed by EDG;
- Approve the Revenue Gap for FY 2022-23 as Rs. 310.37 Cr. as per True up, and the revenue gap as may be approved by the Hon'ble Commission during the process of finalizing the True-Up petition;
- The Revenue Gap is proposed to be met through budgetary support by the Government of Goa. The letter for Budgetary Support has been submitted as **Annexure-2** to this Petition;
- Approve the Revenue Gap of Rs. 234.20 Cr. for FY 2023-24 as per APR, and standalone Revenue Gap considering revenue from proposed tariff amounting to Rs. 414.73 Cr. for FY 2024-25 on provisional basis and the Revenue Gap as may be approved by the Hon'ble Commission during the process of finalizing Tariff Order;
- To consider the Tariff Design Philosophy and grant approval for proposed changes in Tariff Schedule and to retain the existing applicability clauses, charges for services, miscellaneous charges and general terms & conditions of the Tariff Order for FY 2024-25;
- Approve the revenue at the proposed tariff for FY 2024-25 and the Gap of Rs. 414.73 Cr. till FY 2024-25. The Revenue Gap of Rs. 414.73 Cr. is proposed to be bridged partially through tariff hike on the Consumers of LT Category, increase in the Tariff Slab for the Evening Peak Load Period (6:00 PM to 11:00 PM) from 120% to 140% of normal rate of energy charge (for HT/EHT Category of Consumers) and remaining through budgetary support. The letter for Budgetary Support for FY 2024-25 shall be submitted after issuance of the same by Government of Goa;
- Approve the draft standard PPA for KUSUM-A scheme to be signed between EDG & Farmers/Solar Power Generator submitted in **Annexure-3**.



- Pass suitable orders with respect to True-up of FY 2022-23, APR for FY 2023-24, ARR for FY 2024-25, and Tariff Determination Proposal for FY 2024-25 for the expenses to be incurred by EDG for serving its consumers;
- Grant any other relief as the Hon'ble Commission may consider appropriate;
- The Petitioner craves leave of the Hon'ble Commission to allow further submission, addition and alteration to this petition as may be necessary from time to time;
- Condone any inadvertent omissions/errors/shortcomings and permit EDG to add/change/ modify/ alter this filing and make further submissions as may be required at a future date;
- To pass any other Order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.



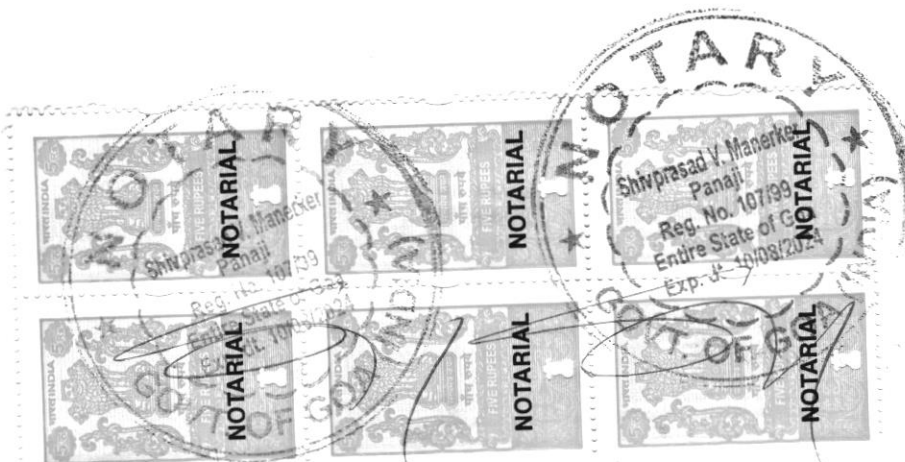
Electricity Department,  
Government of Goa

*[Signature]*

Petitioner

Place: Panaji

Dated: 30<sup>th</sup> November 2023



SOLEMNLY AFFIRMED AND VERIFIED  
BEFORE ME BY *[Signature]*  
*Remona's Chief Electrical Eng*  
REG. No. 10141 DATED 30/11/23.

SHIVPRASAD V. MANERKER  
NOTARY AT PANAJI  
ENTIRE STATE OF GOA (INDIA)



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## **1 INTRODUCTION**

### **Preamble**

The Hon'ble Commission has notified the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 (MYT Regulations, 2021). In line with the same, EDG submits this Petition for approval of True-up of FY 2022-23, APR for FY 2023-24, ARR for FY 2024-25, and Tariff Proposal for FY 2024-25 as per the provisions of MYT Regulations, 2021.

### **Background: Electricity Department of Goa**

The Electricity Department was formed in January 1963 under the Government of Goa, Daman & Diu. It is the only Licensee operating in the State of Goa for transmission and distribution of electrical energy. The Electricity Department of Goa does not have its own generation. Most of the power requirement for the State of Goa is met through its share from Central Sector Power Stations of NTPC Ltd. as allocated by the Central Government.

ED-Goa came into regulatory regime w.e.f. FY 2011-12, i.e., the first tariff filing year. The Electricity Department is a deemed Distribution Licensee within the meaning of Section 2 (17) of Electricity Act 2003 and pursuant to Section 14 of the Electricity Act. Further, Section 42 and 43 of the Electricity Act 2003 prescribes the following duties of the Distribution Licensee:

- To develop and maintain an efficient, co-ordinated and economical distribution system;
- To supply electricity on an application of the consumer in accordance with the provisions specified in the Electricity Act 2003;
- To provide non-discriminatory open access to the consumers;
- To establish a forum for redressal of grievances of the consumers.

The main purpose is to undertake the transmission, distribution and retail supply of electricity in its licence area and for this purpose to plan, acquire, establish, construct, erect, lay, operate, run, manage, maintain, enlarge, alter, renovate, modernize, automate, work and use a power system network in all its aspects and also to carry on the business of purchasing, selling, importing of electrical energy, including formulation of tariff, billing and collection thereof and then to study, investigate, collect information and data, review operations, plan, research, design and prepare project reports, diagnose operational difficulties and weaknesses and advise on the remedial measures to improve and modernize existing sub-transmission and supply lines and sub-stations.

The Electricity Department of Goa caters to 7.04 Lakh consumers with energy consumption of approx. 2,374.11 MU (as on 30<sup>th</sup> September 2023) for FY 2023-24 H1. The Consumers of the Electricity Department of Goa are classified as under:



**Table 1-1: No. of Consumer & Sales for FY 2023-24 H1**

Particulars	FY 2023-24 H1			
	No. of Consumers	%	Sales (MUs)	%
Domestic	5,63,639	80%	742.42	31%
Commercial	1,09,516	16%	363.70	15%
Industrial	6485	1%	1,181.25	50%
Agriculture	13,029	2%	18.24	1%
Temporary	5,344	1%	15.08	1%
Defense Establishment	14	0%	17.98	1%
Others	6869	1%	35.44	1%
<b>Total</b>	<b>7,04,896</b>	<b>100%</b>	<b>2,374.11</b>	<b>100%</b>

The peak demand of Goa during FY 2022-23 was around 727 MW (March 2023). As per CEA LGBR report, for FY 2023-24, the peak deficit for the State of Goa was 0.70%. The peak demand in FY 2023-24 (April to September) recorded in June 2023 was 780 MW. EDG is currently receiving 538.25 MW of power from the Western Region (WR) and 100 MW from the Southern Region (SR). The total firm allocation of power from central sector is approx. 518 MW. In addition, the department also purchases power from Co-generation stations within the State and short-term power from the market and Traders.

EDG hereby submits that the account of FY 2022-23 has been finalised by EDG and submitted to CAG for audit purposes. Accordingly, EDG has considered actual numbers for FY 2022-23 in this Petition. The True-up Petition for FY 2022-23 has also been included with this Petition filing.

EDG also submits that for APR of the year 2023-24, the provisional actual figures for H1 and projected figures of ARR components for H2 have been considered. EDG also submits that the Revenue for FY 2023-24 has been calculated as per the existing Tariff approved by the Hon'ble Commission. EDG further submits that for FY 2024-25, the ARR has been projected considering the number of Consumers and Connected Load and Energy Sales for FY 2023-24 as per the revised projections. It has been projected based on the historical trends and current realistic scenario. All other components have been considered as per MYT Regulations, 2021. Further, EDG has proposed a new tariff for FY 2024-25 to be levied on the consumers.



## **2 OVERALL APPROACH FOR PRESENT FILING**

The Hon'ble Commission had notified JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 on 22<sup>nd</sup> March 2021.

In line with the above Regulations, EDG is filing the True-up, APR petition, and ARR and Tariff Petition for consideration of the Hon'ble Commission in the formats laid down for providing information relating to past, present, and future performance.

### **Truing Up of ARR of FY 2022-23**

Electricity Department Goa (EDG) for FY 2022-23 submits the final truing up of FY 2022- 23 by comparing actual (submitted for Audit) figures for the financial year with those approved by the Hon'ble Commission for FY 2022-23 vide ARR order dated 31<sup>st</sup> March 2022. The balance sheet for FY 2022-23 and CAG certificate will be submitted to the Hon'ble JERC promptly after the Audit team releases the same.

### **Annual Performance Review for FY 2023-24**

EDG is filing this Annual Performance Review petition for FY 2023-24 based on the provisional actual performance during the 1st half of the year and revised estimation for the 2nd half of the year taking into considering the approved figures by the Hon'ble Commission vide its Tariff Order dated 30<sup>th</sup> March, 2023.

### **Aggregate Revenue Requirement and Determination of Tariff for FY 2024-25**

The Hon'ble Commission had issued the order for ARR for the MYT Control Period from FY 2022-23 to FY 2024-25 vide order dated 31<sup>st</sup> March 2022. In the said Tariff Order; CAPEX, Capitalisation, Power Purchase requirement and Sales have been approved by the Hon'ble Commission for the base year FY 2021-22 and MYT period from FY 2022-23 to FY 2024-25. Further, considering the same as well as revised projections based on the realistic scenario, EDG has submitted the ARR and tariff proposal for FY 2024-25.



### 3 TRUE-UP OF FY 2022-23

The Commission through its directives has directed the Petitioner to file True-ups based on audited accounts along with the upcoming tariff petitions going forward in a timely manner.

Complying with the directives, the EDG hereby submits the True-up Petition for FY 2022-23 before the Hon'ble Commission. The Financial Accounts for FY 2022-23 are completed. The CAG audit is in process, upon finalisation, the CAG Audit certificate will be submitted separately before the Hon'ble JERC. In the interim, a Copy of Letter submitted to CAG team has been submitted in the **Annexure-4** of this petition.

The EDG has considered the numbers approved in Tariff Orders as well as the actual numbers from the provisional annual accounts of FY 2022-23 for the purpose of the Truing-up of FY 2022-23.

#### Energy Sales

The actual total sales of EDG for FY 2022-23 is 4,438.06 MU. The Category-wise actual and approved sale for FY 2022-23 is shown in the table below:

**Table 3-1: Sales for FY 2022-23 (MUs)**

S/No	Category of Consumer	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
<b>A. LOW TENSION SUPPLY</b>			
1.	LTD/Domestic	1,384.58	1,368.24
2.	LT-LIG (Low Income Group)	1.37	0.94
3.	LTC/Commercial	472.52	477.04
4.	LTI/ Industrial	80.91	89.98
5.	LT Mixed/ LT-P Hotel Industries	4.48	3.74
6.	LTAG/LT-AGP (Pump Sets/Irrigation)	18.08	16.40
7.	LTAG/LT-AGA (Allied Activities)		1.23
8.	LTPL Public lighting	29.61	45.60
9.	LT Hoarding /Sign Board	0.16	0.24
<b>B. HIGH TENSION SUPPLY</b>			
10.	HTD Domestic	0.38	0.36
11.	HT-Commercial	135.02	166.25
12.	HTI/Industrial – Connected at 11/33 kV	1,499.12	1,407.96
13.	HTI/Industrial – Connected at 110 kV		250.74
14.	HTFS Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)	555.35	516.07
15.	HTAG/HT-AGP (Pump Sets/Irrigation)	15.54	6.68
16.	HTAG/HT-AG (Allied Activities)		12.87
17.	HTMES/Defence Establishment	26.96	31.81



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S/No	Category of Consumer	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
<b>C. TEMPORARY SUPPLY</b>			
18.	LT-Temporary Domestic	9.77	2.91
19.	LT-Temporary Commercial		23.31
20.	HT-Temporary	2.33	5.17
<b>D. SINGLE POINT SUPPLY</b>			
21.	Residential Complexes	-	-
22.	Commercial Complexes	5.69	5.48
23.	Industrial Complexes	-	-
<b>E. OTHER CATEGORIES</b>			
24.	EV Charging Stations	-	5.04
<b>Total</b>		<b>4,241.87</b>	<b>4,438.06</b>

The Hon'ble Commission is requested to approve the actual Sales figures considered in the table above for True-up of FY 2022-23.

### Number of Consumers

The actual total number of Consumers of EDG for 2022-23 is 6.97 lakh. The Category-wise actual and approved consumers for FY 2022-23 is shown in the table below:

**Table 3-2: Number of Consumers for FY 2022-23 (Nos.)**

S/No	Category of Consumer	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
<b>A. LOW TENSION SUPPLY</b>			
1.	LTD/Domestic	5,88,323	5,56,473
2.	LT-LIG (Low Income Group)	1,314	873
3.	LTC/Commercial	1,08,137	1,07,579
4.	LTI/ Industrial	5,799	5,592
5.	LT Mixed/ LT-P Hotel Industries	125	116
6.	LTAG/LT-AGP (Pump Sets/Irrigation)	12,634	12,560
7.	LTAG/LT-AGA (Allied Activities)		309
8.	LTPL Public lighting	1,097	6,739
9.	LT Hoarding /Sign Board	47	66
<b>B. HIGH TENSION SUPPLY</b>			
10.	HTD Domestic	3	4
11.	HT-Commercial	302	316
12.	HTI/Industrial – Connected at 11/33 kV	915	793





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S/No	Category of Consumer	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
13.	HTI/Industrial – Connected at 110 kV		7
14.	HTFS Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)	26	23
15.	HTAG/HT-AGP (Pump Sets/Irrigation)	47	44
16.	HTAG/HT-AG (Allied Activities)		3
17.	HTMES/Defence Establishment	14	14
<b>C. TEMPORARY SUPPLY</b>			
18.	LT-Temporary Domestic	2,609	1,738
19.	LT-Temporary Commercial		3,667
20.	HT-Temporary	11	15
<b>D. SINGLE POINT SUPPLY</b>			
21.	Residential Complexes	-	-
22.	Commercial Complexes	1	1
23.	Industrial Complexes	-	-
<b>E. OTHER CATEGORIES</b>			
24.	EV Charging Stations	-	4
<b>Total</b>		<b>7,21,405</b>	<b>6,96,936</b>

The Hon'ble Commission is requested to approve the actual number of consumers considered in the table above for True-up of FY 2022-23.

### Connected Load

The Category-wise actual and approved load for FY 2022-23 is shown in the table below:

**Table 3-3: Connected Load for FY 2022-23 (kW)**

S/No	Category of Consumer	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
<b>A. LOW TENSION SUPPLY</b>			
1.	LTD/Domestic	18,08,437	17,91,618
2.	LT-LIG (Low Income Group)	117	100
3.	LTC/Commercial	4,07,424	4,19,829
4.	LTI/ Industrial	1,46,918	1,14,727
5.	LT Mixed/ LT-P Hotel Industries	2,757	2,328
6.	LTAG/LT-AGP (Pump Sets/Irrigation)	52,385	36,052
7.	LTAG/LT-AGA (Allied Activities)		1,819
8.	LTPL Public lighting	3,212	14,790
9.	LT Hoarding /Sign Board	567	496



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S/No	Category of Consumer	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
<b>B. HIGH TENSION SUPPLY</b>			
10.	HTD Domestic	300	384
11.	HT-Commercial	90,575	1,09,814
12.	HTI/Industrial – Connected at 11/33 kV	6,19,237	4,85,089
13.	HTI/Industrial – Connected at 110 kV		67,008
14.	HTFS Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)	95,340	1,09,728
15.	HTAG/HT-AGP (Pump Sets/Irrigation)	12,610	10,790
16.	HTAG/HT-AG (Allied Activities)		2,112
17.	HTMES/Defence Establishment	8,470	7,723
<b>C. TEMPORARY SUPPLY</b>			
18.	LT-Temporary Domestic	9,107	4,121
19.	LT-Temporary Commercial		21,767
20.	HT-Temporary	2,468	3,982
<b>D. SINGLE POINT SUPPLY</b>			
21.	Residential Complexes	-	-
22.	Commercial Complexes	4,035	2,400
23.	Industrial Complexes	-	-
<b>E. OTHER CATEGORIES</b>			
24.	EV Charging Stations	-	210
<b>Total</b>		<b>32,63,959</b>	<b>32,06,886</b>

The Hon'ble Commission is requested to approve the actual values of connected load considered in the table above for True-up of FY 2022-23.

### **Intra-State Distribution Loss & Inter-State Transmission Loss**

EDG submits that the actual Intra-State Distribution Loss is 7.41% and Inter State Transmission Loss is 3.75% (Inter-State loss for WRPC 3.26% & SRPC 6.50%), respectively, for FY 2022-23 compared to that approved by Hon'ble Commission at Distribution Loss as 10.25% and Inter-State loss for WRPC at 3.34% & SRPC at 7.92% vide Order dated 31<sup>st</sup> March, 2022. It is requested to approve the actual Distribution Loss level as mentioned in this para.

EDG while computing Energy balance for entire FY 2022-23 has considered the actual of UI Over-Drawal / Under-Drawal, Purchase from Traders, and Sale to Exchange, etc.



**Table 3-4: Energy Balance for FY 2022-23**

S/No	Item	Actual FY 2022-23 (MUs)
<b>1.</b>	<b>Energy Input at Goa Periphery</b>	<b>4,666.85</b>
<b>2.</b>	<b>Total Power Scheduled/ Purchased at Goa Periphery</b>	
	Total Scheduled Billed Drawal – CGS	4,209.64
	Add: Overdrawal	75.36
	Add: Power purchase from NVVN / Banking	23.28
	Add: Power purchase from Traders/ Open Market	205.72
	Add : Hydro Power	-
	Less: Underdrawal	0.79
	Add: Renewable Power	648.17
	Less: Power diverted to Exchange	312.72
	<b>Total</b>	<b>4,848.65</b>
<b>3.</b>	<b>PGCIL Losses – MUs</b>	<b>181.80</b>
	<b>PGCIL Losses - %</b>	<b>3.75%</b>
<b>4.</b>	<b>Total Power Purchased within Goa State</b>	
	Add: Co-generation	123.04
	Add: Independent Power Producers (IPP)	
	Add: Net Metering	1.44
	Add: PM KUSUM	
	Add: Hindustan Waste Treatment Plant	2.00
	<b>Total</b>	<b>126.48</b>
<b>5.</b>	<b>Total Power Purchase availability after PGCIL Losses</b>	<b>4,793.33</b>
	Less: Retail Sales to Consumers	4,438.06
	Distribution Losses – MUs	355.27
<b>6.</b>	<b>Distribution Losses - %</b>	<b>7.41%</b>

The Hon'ble Commission is requested to approve the Distribution Loss for True-Up of FY 2022-23 as submitted in the above table.

#### **RPO (Renewable Purchase Obligation) for FY 2022-23**

In accordance with the Joint Electricity Regulatory Commission for state of Goa & Union Territories (Procurement of Renewable energy) Regulations, 2010 and its amendments thereof, EDG is obliged to fulfil the RPO compliances.

The details regarding the fulfilment of RPO has been provided in Tariff Format 4(A) of this Petition.

In the case of Net Metering for Solar RPO, the surplus quantum of energy (MUs) (after netting



off the import (sales) from the export) are considered for Power Purchase.

Also, the units purchased from renewable sources, i.e., NVVNL (MTOA) and SECI-Solar (LTOA) are taken from the Regional Energy Accounts (REA), as submitted for the True-up of FY 2020-21 and FY 2021-22. The remaining sources are taken as per the power purchase bills.

Furthermore, the EDG in the True-up Petition FY 2016-17 had submitted that the power purchased from NVVNL 'Wind' was presented as NVVNL 'Hydro'. Accordingly, the Commission in its True-up Order approved it and considered the same as Hydro in the RPO. As per the RPO Regulations, the Hydro power will not be a part of the sales considered for RPO Target. Accordingly, the Commission had approved the respective distribution loss, but not considered the 72.88 MUs as Wind RPO. The EDG in the RPO hearing for the Petition No 61/2012 dated 07.11.2023, has submitted the same. Further, the EDG is humbly submitting to the Hon'ble JERC here in the Petition to reconsider and approve the 72.88 MUs power procured from NVVNL Wind in the True-up of FY 2022-23 under the Non-Solar Head of the RPO.

On the above-mentioned accounts, the RPO compliance done by EDG for FY 2022-23 is given in the table below:

**Table 3-5: Solar & Non-Solar RPO Status for FY 2022-23**

S/No	Description	Unit	FY 2022-23
1.	<b>Sales Within State</b>	<b>MUs</b>	<b>4438.06</b>
2.	<b>RPO</b>	<b>%</b>	<b>18.35%</b>
	- Solar	%	9.00%
	- Non Solar	%	9.00%
	- HPO	%	0.35%
3.	<b>RPO</b>	<b>MUs</b>	<b>814.38</b>
	- Solar	MUs	399.43
	- Non Solar	MUs	399.43
	- HPO	MUs	15.53
4.	<b>Power Purchase</b>	<b>MUs</b>	<b>895.71</b>
	- Solar	MUs	382.07
	- Non Solar	MUs	497.96
	- HPO	MUs	15.67

### Renewable Energy Certificate (REC)

EDG has made an extensive effort in fulfilling the RPO targets for FY 2022-23 mainly by purchase of physical power. Due to deficit in the Solar RPO compliance, EDG purchases Solar REC. For FY 2022-23, EDG has purchased 83.30 MUs of Solar RECs amounting to Rs. 11.17 Cr.

Below table shows the approved and actual status of RPO and REC for FY 2022-23:



**Table 3-6: RPO & REC Status for FY 2022-23**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
<b>Sales within State (MU)</b>	<b>4241.87</b>	<b>4438.06</b>
Hydro Power available at State Periphery (MU)	-	-
Distribution Loss (%)	10.25%	7.41%
Resultant Energy Sales for calculation of RPO (after adjustment of power from hydro sources) (MU)	4241.87	<b>4438.06</b>
<b>RPO Obligation (in %)</b>	<b>18.35%</b>	<b>18.35%</b>
Solar	9.00%	9.00%
Non-Solar	9.35%	9.00%
HPO	-	0.35%
<b>RPO Obligation for the year (in MU)</b>	<b>778.38</b>	<b>814.38</b>
Solar	381.77	399.43
Non-Solar	396.61	399.43
HPO	-	15.53
<b>RPO Compliance (Physical Power available at Consumer Periphery after adjusting Inter-State Transmission and Intra-State Distribution Loss)</b>	<b>776.40</b>	<b>895.71</b>
Solar	367.77	382.07*
Non-Solar	408.63	497.96**
HPO	-	15.67
<b>Cumulative RPO Shortfall (MU)</b>	<b>391.41</b>	<b>104.05</b>
Solar	344.30	95.76
Non-Solar	47.10	8.29
HPO	-	(0.14)

**Note:**

\*382.07 MUs of Solar RPO includes REC of 83.30 MUs and Net-Metering of 36.13 MUs,

\*\* 72.88 MUs have also been adjusted in total Non-Solar RPO Compliance.

EDG requests the Hon'ble Commission to approve the Renewable Purchase Obligation status including the Renewable Energy Certificate status for FY 2022-23.

**Power Purchase Quantum & Cost for 2022-23**

EDG meets its total energy requirement from its allocation from the Central Sector Generating Stations (CGS) i.e., NTPC, NPCIL, etc., and Co-generating Company like Vedanta Plant-1, Vedanta Plant-2, and Goa Sponge & Power Ltd. as per allocation from time to time. EDG also meets a part of its energy requirement through purchase of Short-term power from Traders and Power Exchanges. Also, Renewable Power has been procured from NVVNL, SECI, Manikaran Power, APPCPL, Net Metering, and Hindustan Waste Treatment Plant.



The Transmission Charges comprises transmission charges paid to Western Region, Southern Region, and POSOCO fee and charges.

The Power Purchase cost also includes Electricity Duty, Cess, Incentives, Supplementary Charges, etc. and the same are considered on actual basis.

During peak summer hours in March to May 2022, Goa faced a 125 MW power shortfall, which was primarily addressed by purchasing power through IEX across various segments like DAM, RTM, GDAM, TAM, etc. Due to high power rates at 12.53/kWh on IEX and RLDC's instructions to limit demand, Goa had to enforce 100-125 MW load restrictions on industrial consumers. To ensure the smooth operation of high-tension (HT) industries, HT consumers in Goa requested the EDG to buy more expensive power, with the additional cost shared by them at a reasonable flat rate. The EDG received approval from the Hon'ble Commission and purchased power, recovering Rs. 33.34 Crore from HT consumers. However, the recovered amount is deducted from the overall Power Purchase, which is submitted in Format-4 in the True-up of FY 2022-23.

EDG submits that the Regulation 34 of JERC MYT Regulations, 2021 specifies that:

"34.1 The rebate to be provided by a Generating Company or Transmission Licensee to a Distribution Licensee for early payment of bills shall be in accordance with the prevalent CERC Tariff Regulations.

34.2 Such rebate earned by the Distribution Licensee shall be considered under Non-Tariff Income for the Distribution Licensee.

34.3 Any rebate provided by the Generating Company or Transmission Licensee to the beneficiaries shall not be allowed as an expense for the Generating Company or Transmission Licensee, as the case may be."

In view of the above, EDG submits that the department pays the Power Purchase bills upfront to avail the rebate as per the norms in the bills generated. Such rebate earned by EDG has been considered as 'Incentives from Generators (Rebate)' under Non-Tariff Income and the same has been deducted from the overall revenue requirement for the FY 2022-23.

Further, EDG submits that the Hindustan Waste Treatment Plant located at Saligao, Goa has increased its capacity to 1.2 MW in FY 2022-23 and EDG started procuring additional power. Meanwhile, due to the time taken in administrative procedures for the approval of the PPA, there was delay in payment towards the bills generated. However, the same is considered in FY 2023-24. Due to this, the amount as per the bill differed with the actual amount paid for the months from August 2022 to March 2023. Hence, for FY 2022-23, the amount paid for the power purchase is considered on the basis of the actual paid as per the accounts.

The table below shows the summary of Power Purchase from various sources along with their costs for FY 2022-23 including Transmission Charges, UI charges and purchase from traders:



Table 3-7: Power Purchase Quantum & Cost for FY 2022-23

S/No	Source	Approved in T.O dated 31 <sup>st</sup> March, 2022		Actual FY 2022-23	
		Quantum (MUs)	Cost (Rs. Crore)	Quantum (MUs)	Cost (Rs. Crore)
<b>A)</b>	<b>NTPC</b>	<b>3,445.35</b>	<b>1,124.26</b>	<b>3974.08</b>	<b>1495.95</b>
1.	KSTPS	1,572.93	344.29	1657.47	428.59
2.	VSTPS-I	252.69	72.47	272.13	76.65
3.	VSTPS-II	106.61	27.47	116.33	31.17
4.	VSTPS-III	100.82	28.54	98.06	21.25
5.	VSTPS-IV	108.45	37.77	129.31	41.91
6.	VSTPS-V	54.51	19.25	58.22	18.93
7.	KGPP	17.14	12.92	-	11.30
8.	GGPP	13.01	13.91	-	9.76
9.	SIPAT-I	215.64	62.17	202.41	77.22
10.	KSTPS-III	51.69	14.59	48.38	14.65
11.	RSTPS	535.92	208.19	670.41	323.06
12.	SIPAT-II	91.43	26.71	98.95	30.14
13.	Solapur	55.46	47.79	76.10	63.65
14.	Gadarwara	59.20	54.73	128.12	90.30
15.	Lara	51.84	32.19	110.25	49.58
16.	Khargone	64.15	44.48	68.18	58.54
17.	Mauda I	51.27	39.88	103.19	59.89
18.	Mauda II	42.56	36.92	136.56	89.33
<b>B)</b>	<b>NPCIL</b>	<b>215.19</b>	<b>67.22</b>	<b>235.56</b>	<b>67.27</b>
1.	KAPS	119.36	33.56	120.52	27.59
2.	TAPS	95.84	33.65	115.04	39.68
<b>C)</b>	<b>Traders</b>	<b>139.59</b>	<b>60.32</b>	<b>(116.65)</b>	<b>19.63</b>
1.	IEX Purchase	139.59	60.32	164.37	115.78
2.	IEX Sales	-	-	312.72	139.89
3.	Traders (Net Drawal/Injection)	-	-	31.70	43.74
<b>D)</b>	<b>Net UI (Over/Under Drawal)</b>	<b>-</b>	<b>-</b>	<b>74.57</b>	<b>61.35</b>
<b>E)</b>	<b>Banking of Power</b>	<b>-</b>	<b>-</b>	<b>23.28</b>	<b>0.46</b>
<b>F)</b>	<b>Co-Generation</b>	<b>149.79</b>	<b>35.95</b>	<b>123.04</b>	<b>29.07</b>
1.	Vedanta Plant-1, Amona	90.88	21.81	51.94	12.47
2.	Vedanta Plant-2	53.10	12.74	59.89	13.87



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S/No	Source	Approved in T.O dated 31 <sup>st</sup> March, 2022		Actual FY 2022-23	
		Quantum (MUs)	Cost (Rs. Crore)	Quantum (MUs)	Cost (Rs. Crore)
3.	Goa Sponge and private limited	5.81	1.39	5.18	1.24
4.	PTC India Ltd, New Delhi(GEPL)			6.04	1.49
<b>G)</b>	<b>RPO Obligation</b>	<b>776.40</b>	<b>325.64</b>	<b>669.67</b>	<b>303.16</b>
	<b>Solar</b>	<b>367.77</b>	<b>168.20</b>	<b>265.92</b>	<b>139.62</b>
1.	NVVNL Solar	12.00	6.60	13.26	7.85
2.	Solar STOA	244.64	113.75	200.89	101.49
3.	SECI Solar	48.00	26.40	50.33	29.85
4.	CONVERGENCE SOLAR	43.36	15.61	-	-
5.	Net Metering	19.76	5.84	1.44	0.44
	<b>Non-Solar</b>	<b>408.63</b>	<b>157.44</b>	<b>403.75</b>	<b>163.53</b>
6.	Non Solar – SECI Wind Tranche II LTOA	112.42	31.37	139.46	37.79
7.	STOA (Non Solar)	220.25	103.84	228.56	115.42
8.	SECI Wind Tranche-VI	75.00	21.75	33.72	8.72
9.	Hindustan waste treatment plant Goa	0.96	0.48	2.00	1.59
<b>H)</b>	<b>REC</b>	-	-	-	11.17
<b>I)</b>	<b>PGCIL Charges</b>		<b>226.15</b>	-	<b>335.13</b>
<b>J)</b>	<b>Additional Power Purchase Cost recovered from Industrial Consumers</b>			<b>(26.76)</b>	<b>(33.34)</b>
	<b>TOTAL</b>	<b>4,726.31</b>	<b>1,839.53</b>	<b>4956.78</b>	<b>2289.84</b>
<b>K)</b>	<b>Power Purchase cost per unit</b>	<b>3.89</b>		<b>4.62</b>	

EDG submits that actual overall power purchase cost per unit is arrived at Rs. 4.62/kWh against approved power purchase cost of Rs. 3.89/kWh in Tariff Order.

EDG request the Hon'ble Commission to approve the Power purchase cost including the Transmission charges for FY 2022-23.

### Capital Work in Progress, GFA and Depreciation

**GFA:** The Opening Balance of GFA is Rs. 1,566.39 Cr. for FY 2022-23. The following table shows the opening balance, additions, deductions and closing balance of GFA for FY 2022-23:





**Table 3-8: GFA for FY 2022-23**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
Opening Value of Assets at the beginning of the year	2,103.98	1,566.39
Additions during the year	950.92	228.15
Less: Capitalization through Grant & Consumer Contribution	-	-
Value of assets sold/disposed off	-	9.65
<b>Gross Fixed Assets at the end of year</b>	<b>3,054.90</b>	<b>1,784.89</b>

The Hon'ble Commission vide its Order dated 31<sup>st</sup> March 2022 has considered the Opening GFA value of assets for FY 2022-23 as Rs. 2103.98 Cr. as the audited accounts were not available (i.e., FY 2017-18 to FY 2020-21 audited accounts were not completed when the Tariff Order was issued on 30.03.2022). In the current Petition, for True Up for FY 2022-23, EDG is submitting the above mentioned GFA figures based on the Provisional Accounts and Fixed Asset Register for FY 2022-23 as directed by the Hon'ble Commission.

CAPEX and Capitalisation:

EDG submits that to relieve the overloaded infrastructure, to cater to the load, and to improve the quality of Supply and increasing demand from HT and LT consumers, EDG had undertaken the CAPEX of Rs. 722.49 Cr. and Capitalisation of Rs. 228.31 Cr. for FY 2022-23 as per the provisional accounts. The detailed capital investment plan (scheme-wise) in line with Regulation 24 of MYT Regulations, 2021 has been submitted with Format 7 of the submission.

EDG requests the Hon'ble Commission to allow the actual expenditure and capitalisation in order to ensure the creation of infrastructure for adherence to Standards of Performance and Supply Code Regulations.

Depreciation:

As per Regulation 31 of MYT Regulations, 2021, depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The same have been applied on different asset categories. EDG further submits that the depreciation arrived in annual accounts for FY 2022-23 is based on the rates specified by Hon'ble Commission in its MYT Regulations, 2021. The rates of depreciation for various assets are as tabulated below:

**Table 3-9: Rate of Depreciation applicable for various assets for FY 2022-23**

S/No	Particulars	Useful Life (Years)	Rate of Depreciation (%)
1.	Land owned under full title.	Infinity	0
2.	Land held under lease.		
A.	For investment in land.	Period of lease or the period remaining unexpired on the assignment of the lease	0



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S/No	Particulars	Useful Life (Years)	Rate of Depreciation (%)
B.	For cost of clearing site.	Period of lease remaining unexpired at the date of clearing the site	0
3.	<b>Assets purchased new -</b>		
A.	Buildings and civil engineering works of a permanent character, not mentioned above:		
	- <i>Offices and showrooms</i>	50	1.8
	- <i>Temporary erection such as wooden structures</i>	5	18
	- <i>Roads other than kutcha roads</i>	50	1.8
	- <i>Others.</i>	50	1.8
B.	Transformers, transformer (kiosk) substation equipment & other fixed apparatus (including plant foundations)		
	- <i>Transformers (including foundations) having a rating of 100 kilo volt amperes (kVA) and over</i>	25	3.6
	- <i>Others.</i>	25	3.6
C.	Switchgear, including cable connections.	25	3.6
D.	Lightning arrestors:		
	- <i>Station type</i>	25	3.6
	- <i>Pole type</i>	15	6
	- <i>Synchronous condenser.</i>	35	2.57
E.	Batteries.	5	18
F.	Underground cable including joint boxes and disconnected boxes.	35	2.57
G.	Cable duct system.	50	1.8
H.	Overhead lines including supports:		
	- <i>Lines on fabricated steel operating at nominal voltages higher than 66 kV</i>	35	2.57
	- <i>Lines on steel supports operating at nominal voltages higher than 11 kV but not exceeding 66 kV</i>	25	3.6
	- <i>Lines on steel or reinforced concrete supports</i>	25	3.6
	- <i>Lines on treated wood supports.</i>	25	3.6
I.	Meters:		
	- <i>Electro Mechanical</i>	15	6
	- <i>Electronic/Smart Meters.</i>	10	9
J.	Self-propelled vehicles.	5	18
K.	Air conditioning plants:		
	- <i>Static</i>	15	6
	- <i>Portable.</i>	5	18



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S/No	Particulars	Useful Life (Years)	Rate of Depreciation (%)
<b>L.</b>	Others:		
	- Office furniture and fittings	15	6
	- Office equipment	15	6
	- Internal wirings including fittings and apparatus	15	6
	- Street Light fittings.	15	6
<b>M.</b>	Apparatus let on hire:		
	- Other than motors	5	18
	- Motors	15	6
<b>N.</b>	Communication equipment:		
	- Radio and higher frequency carrier systems	15	6
	- Telephone lines and telephones.	15	6
<b>O.</b>	I.T. Equipment and Software.	6.67	15
<b>P.</b>	Assets purchased in second hand and assets not otherwise provided for in the schedule.	Such reasonable period as the Commission determines in each case having regard to the nature, age and conditions of assets at the time of its acquisition by the current owner.	

EDG submits that during FY 2021-22, some assets were recognized in financial statements as 'Other' assets, which actually involved miscellaneous spares of various assets, which are to be used in case of breakdown of assets. These were reclassified as per regulatory directions and capitalized in actual assets group to which same spares are belonging. Hence, the difference in depreciation due to reclassification of assets is recognized in FY 2022-23 accounts in BS13 (A) (page 6 of Notes).

Depreciation of Rs. 91.61 Cr. as reflecting in the audited annual accounts is claimed, which is excluding the amount of depreciation on assets created through Electricity Duty, Consumer Contribution and Grants. The detailed working of depreciation is provided in Tariff Format 15 of this Petition.

The following table below shows the depreciation arrived by EDG for FY 2022-23 based on the approved depreciation rates specified by the Hon'ble Commission for different asset class:

**Table 3-10: Depreciation for FY 2022-23 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
Opening Gross Fixed Assets (excluding grants)	1261.89	1192.04
Additions During the Fiscal Year	231.55	228.32
Less: Capitalization through grants and Electricity duty	-	79.24



Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
Less: Grant Component of APDRP Part-B / IPDS scheme		6.25
Less: Value of assets sold/disposed off	-	9.65
Less: Deposit Works		24.56
Closing Gross Fixed Assets	1493.43	1,300.67
<b>Average Gross Fixed Assets</b>	<b>1377.66</b>	<b>1,246.36</b>
Weighted Average Rate of Depreciation	3.82%	5.47%
<b>Depreciation</b>	<b>52.64</b>	<b>68.14</b>

EDG submitted that, from the above table it can be observed that average Rate of Depreciation over GFA was 3.82% as approved by the Hon'ble Commission. However as per the provisional accounts, average depreciation rate is 5.47%.

The Hon'ble Commission is requested to approve the Depreciation for FY 2022-23 as submitted in the table above.

### Operation & Maintenance Expenses

Operation & Maintenance Expenses consists of three elements, viz., Employee Expenses, A&G Expenses and R&M Expenses:

- Employee Expenses comprise salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses.
- Administrative and General Expenses mainly comprise rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.
- Repairs and Maintenance Expenses are towards the day-to-day upkeep of the distribution network of the Company and form an integral part of the Company's efforts towards reliable and quality power supply as also in the reduction of losses in the system.

**Employee Expenses:** EDG has considered the Employee expense for FY 2022-23 based on the actual employee expenses incurred during the entire year. The details of the Employee Expenses are outlined in the following table for the approval of the Hon'ble Commission:

**Table 3-11: Employee Expenses for FY 2022-23 (Rs. Cr.)**

S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
<b>A.</b>	<b>Employee Cost (Other than covered in 'C'&amp;'D')</b>		<b>372.01</b>
	- Salaries		372.01
	- Dearness Allowance (DA)		
	- Other Allowances+ HRA		
	- Interim Relief / Wage Revision		



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S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
	- Overtime		
	- Bonus		
	- Generation Incentive		
	- Any Other Item (specify)		
<b>B.</b>	<b>Other Costs</b>		
	- Medical Expenses Reimbursement		
	- Travelling Allowance(Conveyance Allowance)		
	- Leave Travel Assistance		
	- Payment Under Workman's Compensation Act		
	- Electricity Concession to Employees		
	- Other Staff Welfare Expenses		
	- Any Other Item (specify)		
<b>C.</b>	<b>Apprentice and Other Training Expenses</b>		
	<b>Total (A+B+C)</b>	<b>340.57</b>	<b>372.01</b>
<b>D.</b>	<b>Contribution to Terminal Benefits</b>	<b>3.99</b>	<b>2.66</b>
	- Earned Leave Encashment		
	- Provident Fund Contribution (NPS)		
	- Provision for PF Fund		
	- Pension		2.66
	- Gratuity		
	- Ex-gratia		
	- Any Other Item (specify)		
<b>E.</b>	<b>Grand Total (A+B+C+D)</b>	<b>344.56</b>	<b>374.68</b>
<b>F.</b>	Less : Salary Payable at the beginning of the year		<b>(26.32)</b>
	<b>Net Employee Expenses (E)-(F)</b>	<b>344.56</b>	<b>348.35</b>

EDG submits that Employee Expenses as approved by the Hon'ble Commission for FY 2022-23 was Rs. 344.56 Crore, whereas the actual expenditure for FY 2022-23 was Rs. 348.35 Crore, resulting in increase of ~ 1.09 % over approved cost.

It is submitted that Employee Expenses needs to be considered as uncontrollable and therefore, EDG requests the Hon'ble Commission to approve the actual Employee Expenses during FY 2022-23 reflecting in annual accounts.

**Repairs & Maintenance Expenses:** The Repairs & Maintenance Expenses have been claimed as



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per expenses actually incurred during FY 2022-23, which is reflected in the annual accounts of FY 2022-23.

**Table 3-12: R&M Expenses for FY 2022-23 (Rs. Cr.)**

S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
<b>A.</b>	<b>Plant and Machinery</b>		<b>45.48</b>
	- 220 kV Sub-Station		
	- 110 kV Sub-Station		
	- 33kV Sub-Station		
	- 11kV Sub-Station		
	- Switchgear and cable connections		
	- Others		
<b>B.</b>	<b>Building</b>		<b>4.53</b>
	- Repairs and maintenance of transformers		0.003
	- Maintenance & repairs of electrical residential and non-residential buildings		4.52
<b>C.</b>	<b>Civil Works</b>		
<b>D.</b>	<b>Hydraulic Works</b>		
<b>E.</b>	<b>Lines, Cables, Networks etc.</b>		
	- 220 kV Sub-Station		
	- 110 kV Sub-Station		
	- 33kV Lines		
	- 11kV Lines		
	- LT Lines		
	- Others		
<b>F.</b>	<b>Vehicles</b>		<b>15.83</b>
<b>G.</b>	<b>Furniture and Fixtures</b>		
<b>H.</b>	<b>Office Equipment</b>		
<b>I.</b>	<b>Station Supplies</b>		
<b>J.</b>	<b>Metering Equipment</b>		<b>0.20</b>
<b>K.</b>	<b>Any Other Item</b>		<b>0.03</b>
	- Running and Maintenance of workshop		



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S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
	- Compensation for electrocuted Animals		0.03
	- Compensation for electrocuted Human Beings		
<b>L.</b>	<b>Gross R&amp;M Expenses</b>		<b>66.01</b>
	Add: Outstanding at the end of the current year		14.41
	Less: Advances to Contractors at the end of the year		
	Add: Advances to Contractors at the beginning of the year		
	Less: Outstanding at the beginning of the current year		21.25
	Add: Material lying at site at the beginning of current year		49.30
	Less: Material lying at site at the end of current year		84.11
<b>M.</b>	<b>Net R&amp;M Expenses</b>	<b>55.33</b>	<b>24.36</b>

It is submitted that EDG has been undertaking various Repairs & Maintenance activities as a step towards improvement of systems, reduction in breakdowns, and reduction in response time and increasing preventive maintenance.

EDG further submits that R&M expenses are necessary for maintenance of infrastructure and for ensuring proper Standards of Performance of the Electricity Department Goa and therefore requests the Hon'ble Commission to approve Rs. 24.36 Cr. for FY 2022-23 as R&M expenses.

**Administrative & General expenses:** The administrative expense mainly comprise rents, professional charges, office expenses, etc. The expenses incurred by the EDG for FY 2022-23 are shown in the table below:

**Table 3-13: A&G Expenses for FY 2022-23 (Rs. Cr.)**

S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
<b>A</b>			
1.	Lease/ Rent		1.55
2.	Insurance		
3.	Revenue Stamp Expenses Account		
4.	Telephone, Postage, Telegram & Telex Charges		
5.	Incentive & Award to Employees/Outsiders		
6.	Consultancy Charges		
7.	Technical Fees		



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S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
8.	Other Professional Charges		0.71
9.	Conveyance and Travelling Expenses		11.87
10.	License and Registration Fees		
11.	Vehicle Expenses (Other Than Trucks and Delivery Vans)		
	- Vehicles Running Expenses Petrol and Oil		
	- Hiring of Vehicles		
12.	Security / Service Charges Paid to Outside Agencies		
	<b>Sub-Total 'A' (1 to 12)</b>		<b>14.13</b>
<b>B</b>	<b>Other Charges</b>		
1.	Fee and Subscription for Books and Periodicals		
2.	Printing and Stationery Expenses		
3.	Advertisement Expenses (Other than Purchase Related) Exhibition & Demo.		0.25
4.	Contributions/Donations to Outside Institutes / Associations		
5.	Electricity Charges of Offices		
6.	Water Charges		
7.	Entertainment Charges		
8.	Miscellaneous Expenses		
	-Wages		0.11
9.	Office Expenses		7.53
10.	Other Charges		19.76
11.	Minor works		
	<b>Sub-Total 'B' (1 to 11)</b>		<b>27.64</b>
<b>C</b>	<b>Legal Fee/Charges</b>		
<b>D</b>	<b>Auditor's Fee</b>		<b>0.10</b>
<b>E</b>	<b>Material Related Expenses</b>		
1.	Freight on Capital Equipment		
2.	Purchase Related Advertisement Expenses		
3.	Vehicle Running Expenses Truck / Delivery Van		
4.	Vehicle Hiring Expenses Truck / Delivery Van		
5.	Other Freight		
6.	Transit Insurance		
7.	Octroi		
8.	Incidental Stores Expenses		





S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
9.	<i>Fabrication Charges</i>		
10.	<i>Minor Works</i>		
	<b>Sub-Total 'E' (1 to 10)</b>		
<b>F</b>	<b>Direction and Supervision Charges</b>		
<b>G</b>	<b>Annual license fee and tariff determination fee payable to JERC</b>		
	<b>Grand Total (A to G)</b>	<b>34.06</b>	<b>41.87</b>

The Hon'ble Commission is requested to approve the actual A&G expenses of Rs. 41.87 Cr. for FY 2022-23.

**O&M Expenses Summary:** Based on the foregoing paragraphs, the O&M expenses for the year FY 2022-23 vis-a-vis the approved level by the Hon'ble Commission is shown in the table below:

**Table 3-14: O&M Expenses for FY 2022-23 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
Employee Expenses	344.56	348.35
A&G Expenses	34.06	41.87
R&M Expenses	55.33	24.36
<b>O&amp;M Expenses</b>	<b>433.95</b>	<b>414.59</b>

The Hon'ble Commission is requested to approve the O&M Expenses for FY 2022-23 as shown in the table above. The details of O&M expense for FY 2022-23 are provided in the Formats 17, 18, 19 & 20 of the Tariff Filing Formats.

### Interest & Finance Charges

The Regulation 29 of MYT Regulations, 2021 provides for Interest and Finance Charges on Loan. EDG submits that the majority of capital assets are created out of the equity contribution from Government of Goa.

EDG has claimed the interest expenses based on normative loan calculation whereby closing GFA for FY 2021-22 has been considered as opening GFA for FY 2022-23 and 70% of capitalisation (after deducting the assets created through Electricity Duty fund available as grants) during FY 2022-23 has been considered as normative debt addition during the financial year. Computation of the addition of normative loan during FY 2022-23 is shown below:



**Table 3-15: Working of Normative loan addition during FY 2022-23 (Rs. Cr.)**

Particulars	Actual FY 2022-23
Additions to GFA (A)	228.32
Less: 60% for Grant Component of APDRP Part-B and 75% Grant Component of IPDS scheme (B)	6.25
Less: Schemes out of ED Fund (C)	79.24
Less: Deposit Works (D)	24.56
<b>Net Additions to GFA (E)</b>	<b>118.28</b>
<b>Normative Loan addition during the year (70% x E)</b>	<b>82.80</b>

Opening balance of normative loan for FY 2022-23 is considered as per the closing balance of normative loan approved during truing up for FY 2021-22. Accordingly, the Interest expenses vis-à-vis approved by the Hon'ble Commission for FY 2022-23 shown below:

**Table 3-16: Interest on normative loan for FY 2022-23 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
Opening Normative Loan	223.50	263.10
Add: Normative Loan during the year	162.08	82.80
Less: Normative Repayment	52.64	91.61
<b>Closing Normative Loan</b>	<b>332.94</b>	<b>254.28</b>
Average Normative Loan	278.22	258.69
Rate of Interest (@SBI MCLR rate plus 100 basis points)	8.00%	8.00%
<b>Interest on Normative Loan</b>	<b>22.26</b>	<b>20.70</b>

EDG submits that the Regulation 29 of JERC MYT Regulations, 2021 specifies that,

“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:

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.”

In view of the above, EDG submits that since, no last available weighted average rate of interest is available, EDG has considered the SBI MCLR Rate as on 01<sup>st</sup> April 2022, i.e., 7.00% plus 100 basis points resulting in 8.00% as the interest rate on normative loan.

The closing Normative Loan for Truing up of FY 2021-22 has been considered as the opening Normative Loan for FY 2022-23.

EDG further submits that the repayment of normative loan has been considered equal to the normative depreciation for FY 2022-23, which is in line with MYT Regulations, 2021.

Other than Interest on normative loan, EDG has claimed other Interest & Finance charges in the table below based on certain financial charges incurred by the department, which are related to bank charges, LC charges, etc. and the same also is in line with the provisional accounts:

**Table 3-17: Other Interest and Finance Charges for FY 2022-23 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
Interest on Normative Loan	16.37	20.70
Other Finance Charges	-	3.07
<b>Total Interest &amp; Finance Charges</b>	<b>16.37</b>	<b>23.77</b>

The Hon’ble Commission is requested to approve the Interest & Finance Charges for FY 2022-23 as computed in the above table. The details of Interest & Finance charges are provided in Format 13 of the Tariff Filing Formats.

### Interest on Working Capital

Regulation 53 of MYT Regulations, 2021, specifies the methodology for calculation of normative Working Capital and Interest on Working Capital as applicable to Goa Electricity Department, as shown below:

*“53. Norms of Working Capital for Distribution Wires Business*

*53.1 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 32.3 & 32.4 of the MYT Regulations, 2021 specifies the following:

*"32.3 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.*

*32.4 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."*

The EDG hereby submits that it has adopted the same methodology adopted by the Hon'ble Commission in the Tariff Order dated 31<sup>st</sup> March 2022 and that stipulated in the aforesaid Regulation 53 and 32.3 & 32.4 of MYT Regulations, 2021. EDG submits that in line with the aforesaid Regulations, the Interest Rate has been considered as SBI MCLR Rate applicable as on 01<sup>st</sup> April 2022, i.e., 7.00%.

**Table 3-18: Interest on Working Capital for FY 2022-23 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
O&M Expenses for one (1) month	36.16	34.55
Maintenance spares at 40% of R&M expenses for one (1) month	1.84	0.81
Receivables equivalent to two (2) months of the expected revenue from consumers at the prevailing tariff	401.36	400.75
Less: Power Purchase cost for one (1) month	153.29	190.82
Less: Amount held as Security Deposit	84.67	184.10
<b>Net Working Capital</b>	<b>201.41</b>	<b>61.19</b>
<b>Interest Rate (%)</b>	<b>9.00%</b>	<b>9.00%</b>
<b>Interest on Working Capital</b>	<b>18.13</b>	<b>5.51</b>

The Hon'ble Commission is requested to approve the Interest on Working Capital for FY 2022-23 as presented in the table above.

### Interest on Consumer Security Deposits

Interest on Security Deposits has been calculated in accordance with the MYT Regulations, 2021 based on the average of opening and closing consumer security deposits during the year. The opening security deposit has been derived based on the closing security deposit of FY 2021-22. The addition during the year has been considered as per the actuals as reflected in the provisional accounts for FY 2022-23.

In accordance with the JERC (Electricity Supply Code) Regulations, 2018 and its amendments thereof, the rate of interest to the consumer has been considered at the Bank Rate declared by



the Reserve Bank of India prevailing on the 1<sup>st</sup> of April 2022, i.e., 4.25% and the same has been considered for computation of Interest on Security deposit, which comes out to be Rs. 7.82 Cr.

Further, it is mentioned that in the earlier submission there were some errors in the addition of consumer security deposits during the previous year and the same has been rectified in this submission. As per the provisional annual accounts, the provision for actual Interest on Security Deposit to be paid by EDG during FY 2022-23 was Rs. 6.43 Cr. and the same has been considered as Interest on Security Deposit for the purpose of True-up.

**Table 3-19: Interest on Security deposit for FY 2022-23 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
Opening Security Deposit	77.02	178.56
Add: Deposits during the Year	15.65	13.33
Less: Deposits refunded	0.37	2.24
Closing Security Deposit	92.31	189.65
Average Security Deposit	84.67	184.10
Bank Rate	4.25%	4.25%
<b>Interest on Security Deposit on normative basis</b>	<b>3.60</b>	<b>7.82</b>
<b>Interest on Security Deposit Paid during the year</b>	<b>-</b>	<b>6.43</b>

## Return on Equity

EDG submits that Regulation 28.2 and 28.3 of MYT Regulations, 2021 provides for Return on Equity (RoE), which specifies as under:

*“28.2 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.*

*28.3 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.”*

In line with the Tariff Order dated 31<sup>st</sup> March 2022, 90% of the equity has been allocated to the Distribution Wires Business and 10% allocation is for the Retail Supply Business. Return on equity rate of 15.50% for the Distribution Wires Business and a rate of 16% for the Retail Supply Business has been considered.

EDG has considered the Opening equity base for FY 2022-23 as 30% of Opening GFA for FY 2022-23 (Net of assets funded by consumer contribution, capital subsidies and grants). The computation of Opening Equity for FY 2022-23 is provided in the table given below:



**Table 3-20: Equity Addition during FY 2022-23 (Rs. Cr.)**

Particulars	FY 2022-23
Additions to GFA (A)	228.32
Less: 60% for Grant Component of APDRP Part-B and 75% Grant Component of IPDS scheme (B)	6.25
Less: Schemes out of ED Fund (C)	79.24
Less: Deposit Works (D)	24.56
<b>Net Additions to GFA (E)</b>	<b>118.28</b>
<b>Normative equity addition during the year (30% X E)</b>	<b>35.48</b>

EDG also submits that the Equity addition during the year has been considered as 30% of the assets capitalized during FY 2022-23 (Net of Schemes created out of Grant Component of APDRP Part-B / IPDS scheme and Electricity Duty). Considering the RoE@15.5% for Distribution Wires Business and RoE@16.0% for the Retail Supply Business, the total Return on Equity for FY 2022-23 is computed as given below:

**Table 3-21: Computation of return on Equity FY 2022-23 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
Opening balance of Normative Equity	379.16	342.33
Equity Addition during year (30% of Capitalization)	69.46	35.48
Closing balance of Normative Equity	448.62	377.82
Average Equity Amount	413.89	360.07
Average Equity – Wires Business (90%)	372.50	324.07
Average Equity – Retail Supply Business (10%)	41.39	36.01
Return on Equity -Wires Business (%)	15.50%	15.50%
Return on Equity Retail Supply Business (%)	16.00%	16.00%
Return on Equity -Wires Business (Rs Crore)	57.74	50.23
Return on Equity Retail Supply Business (Rs. Crore)	6.62	5.76
<b>Total Return on Equity (Rs. Crore)</b>	<b>64.36</b>	<b>55.99</b>

In view of above, the Hon'ble Commission is requested to approve the Return on Equity for FY 2022-23 as calculated in the above table.

### Provision for Doubtful debts

EDG submits that the Regulation 63 of JERC MYT Regulations 2021 specifies that,



**“63. Provision for bad and doubtful debts**

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 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 realised.”

EDG submits that it has made the provision of Rs. 7.71 Cr. (1% of the receivables from Sundry Debtors) in Provisional Annual Accounts for FY 2022-23 towards Doubtful debts.

In view of above, EDG has considered provision for Doubtful Debt for FY 2022-23 is Rs. 7.71 Cr.

**Non-Tariff Income**

Regulation 65 of the MYT Regulations, 2021 specifies 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 in excess of 10% of the salvage value;*
- 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 contractors 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 Non-Tariff Income approved by the Hon'ble Commission in the ARR for FY 2022-23 was Rs. 26.32 Cr. The details of actual Non-Tariff Income for FY 2022-23 are provided in Format 21 of the Tariff Filing Formats.

Actual rebates received for early/prompt payment of the bills from the generators are considered as incentive and the same is taken under 'Rebates from Generators' in the Non-Tariff Income for FY 2022-23.

The summary of total Non-Tariff Income for FY 2022-23 is tabulated below:

**Table 3-22: Non-Tariff Income for FY 2022-23 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
Meter/service rent	26.32	7.65
UI Sales / Sales to Exchange		
Wheeling charges under open access		
Sale Proceeds of dead stock, wastepaper etc.		
Rebates from Generators		29.82
Miscellaneous Receipts		16.92
Deferred Income (Electricity Development fund)		
Income from trading		
Income from Open Access Charges (Application fee, Cross Subsidy Surcharge, Additional Surcharge, Transmission and/or Wheeling Charges, Scheduling Charges etc.		2.13





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Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
<b>Total income</b>	<b>26.32</b>	<b>56.53</b>
Add: prior period income		
<b>Total Non-tariff income</b>	<b>26.32</b>	<b>56.53</b>

In view of above, the Hon'ble Commission is requested to approve the Non-Tariff Income for FY 2022-23 as shown in the above table.

### Aggregate Revenue Requirement for FY 2022-23

In view of the various parameters of the ARR discussed in above paragraphs, the Aggregate Revenue Requirement for FY 2022-23 as approved by the Hon'ble Commission and as per the True-up Petition claimed by EDG are outlined in the following table:

**Table 3-23: Aggregate Revenue Requirement for FY 2022-23 (Rs. Cr.)**

S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 22-23
1.	Cost of fuel	-	
2.	Cost of power purchase (Including Provision for RPO Obligation for previous years)	1,839.53	2,289.84
3.	Employee costs	344.56	348.35
4.	Administration and General expenses	34.06	41.87
5.	R&M Expenses	55.33	24.36
6.	Depreciation	52.64	68.14
7.	Interest and Finance Charges	22.26	23.77
8.	Interest on Working Capital	18.13	5.51
9.	Return on Equity	64.36	55.99
10.	Provision for Bad Debt	-	7.71
11.	Interest on Consumer Security Deposit paid	3.60	7.82
<b>12.</b>	<b>Total Revenue Requirement</b>	<b>2,434.47</b>	<b>2,873.37</b>
13.	Less: Non-Tariff Income	26.32	56.53
<b>14.</b>	<b>Net Revenue Requirement (12-13)</b>	<b>2,408.15</b>	<b>2,816.84</b>
15.	Revenue from Approved Tariff	2,024.02	2,506.47
<b>16.</b>	<b>Net Gap (14-15)</b>	<b>384.13</b>	<b>(310.37)</b>
<b>17.</b>	<b>Energy sales (MU)</b>	<b>4,241.87</b>	<b>4,438.06</b>
<b>18.</b>	<b>Average Cost of Supply (Rs./kWh)</b>	<b>5.68</b>	<b>6.35</b>

The Hon'ble Commission is requested to approve the Net ARR for FY 2022-23 as described in the above table.

### Revenue from Retail Sale of Power

The Revenue from Tariff for FY 2022-23 approved by the Hon'ble Commission in ARR order dated 31<sup>st</sup> March 2022 was Rs. 2,024.02 Cr.



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EDG submits that in the Demand Collection Balance (DCB) for the month of July 2020, the entry of Rs. -5446848, Rs. -305459 & Rs. -3612767 of Fixed charges, FPPCA charges & Energy charges respectively and for the month of May 2021, the entry of Rs.-27795870.04 (On accrual basis Rs. -21621938.04 needs to be rectified) of Energy charges was wrongly classified in the category Unmetered LTPL instead of metered LTPL. However, EDG has taken the necessary measures to rectify these errors and the treatment for the same has been taken in the provisional annual accounts of FY 2022-23. Further, for FY 2020-21, the entry of Rs. -24045467.48 in RRC Referred case was due to an error apparent in SAP. EDG submits that the said error has been rectified in the provisional Accounts of FY 2022-23.

The actual revenue earned from tariffs for FY 2022-23 is Rs. 2,506.47 Cr. and the same has been shown in the table below:

**Table 3-24: Actual Revenue from Tariff for FY 2022-23 (Rs. Crore)**

Particulars	Actual FY 2022-23 (Rs. Crore)				
	Revenue from Fixed Charges	Revenue from Demand Charges	Revenue from Energy Charges	Revenue from FPPCA	TOTAL
<b>A. LOW TENSION SUPPLY</b>					
LTD/Domestic	42.48	-	349.72	67.39	<b>459.60</b>
LT-LIG (Low Income Group)	0.00	-	0.20	0.04	<b>0.25</b>
LTC/Commercial	25.09	-	225.94	44.94	<b>295.97</b>
LT Mixed Hotel Industries	0.14	-	2.01	0.38	<b>2.52</b>
LT/ Industrial	6.84	-	34.23	7.50	<b>48.57</b>
LTAG/Agriculture (Pump sets/Irrigation)	1.08	-	2.42	0.00	<b>3.49</b>
LTAG/Agriculture (Allied Activities)	0.06	-	0.21	0.00	<b>0.28</b>
LTPL Public Lighting	1.46	-	22.73	3.59	<b>27.79</b>
LT Hoardings/Signboards	0.04	-	0.24	0.05	<b>0.34</b>
<b>B. HIGH TENSION SUPPLY</b>					
HTD Domestic	-	0.05	0.17	0.03	<b>0.25</b>
HT- Commercial	-	26.96	82.72	19.90	<b>129.58</b>
HTI / Industrial - Connected at 11/33kV	-	119.80	705.46	152.06	<b>977.33</b>
HTI / Industrial - Connected at 110 kV	-	16.62	122.13	24.67	<b>163.41</b>
HT-Industrial (F/M, Steel Melt, Power Intensive)	-	28.93	255.30	47.39	<b>331.62</b>
HTAG/Agriculture (Pump sets/Irrigation)	-	0.39	1.11	0.00	<b>1.50</b>
HTAG/Agriculture (Allied Activities)	-	0.18	2.57	0.00	<b>2.74</b>
HTMES / Defence Establishment	-	1.78	15.92	3.32	<b>21.02</b>
<b>C. TEMPORARY SUPPLY</b>					
LT Temporary Domestic	0.13	-	1.25	0.24	<b>1.63</b>
LT Temporary Commercial	0.67	-	16.95	3.40	<b>21.02</b>
HT Temporary	-	1.59	4.18	0.95	<b>6.72</b>



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Particulars	Actual FY 2022-23 (Rs. Crore)				
	Revenue from Fixed Charges	Revenue from Demand Charges	Revenue from Energy Charges	Revenue from FPPCA	TOTAL
<b><u>D. SINGLE POINT SUPPLY</u></b>					
Residential Complexes	-	-	-	-	-
Commercial Complexes	-	0.56	2.77	0.64	<b>3.97</b>
Industrial Complexes	-	-	-	-	-
<b><u>E. OTHER CATEGORIES</u></b>					
EV Charging Stations	0.00	-	1.88	0.35	<b>2.23</b>
RRC Referred	0.04	-	4.59	0.02	<b>4.65</b>
<b>TOTAL</b>	<b>78.04</b>	<b>196.86</b>	<b>1,854.70</b>	<b>376.87</b>	<b>2,506.47</b>

In view of above, the Hon'ble Commission is requested to approve Revenue from sale of power for FY 2022-23 as detailed in the above table.

### Revenue Gap for FY 2022-23

EDG in its submission of the Tariff Proposal for FY 2022-23 had submitted to reduce the Tariff for FY 2022-23. Earlier in FY 2020-21 and FY 2021-22, the Government of Goa in its Cabinet decision has decided not to implement and keep the Tariff hike in abeyance for FY 2020-21 and FY 2021-22 due to spread of COVID-19, to revive the economic activities and to help revive the business in the State of Goa, which is heavily dependent on tourism. Accordingly, the EDG proposed reduction in Tariff where the Tariff was retained for FY 2020-21 & FY 2021-22, i.e., Tariff approved by Hon'ble Commission for FY 2019-20 was proposed against the Tariff approved for FY 2021-22, which was kept in abeyance.

EDG would like to submit before Hon'ble Commission that due to the COVID-19 pandemic, in order to boost the economic activity in the State, Government of Goa vide Cabinet decisions taken in the Cabinet Meeting of the Council of Ministers held on 22/10/2020 and 25/03/2021 has approved the following:

Cabinet Decision dated 22/10/2020:

***"Table Item No.4***

*Subsidy to all categories of consumers for the period 1<sup>st</sup> June 2020 till 30<sup>th</sup> September 2020 against the tariff hike as per new Tariff Order issued vide Petition No 21/2019 dated 19<sup>th</sup> May 2020 for Electricity Department, Government of Goa by Hon'ble Joint Electricity Regulatory Commission (JERC)*

**DECISION:** The Council of Ministers resolved to:



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*Grant subsidy to all categories of consumers from 01<sup>st</sup> June, 2020 to 31<sup>st</sup> December, 2020 (7 months) in view of COVID-19 to nullify the impact of hike in Tariff Order issued vide Petition No 21/2019 dated 19<sup>th</sup> May 2020 Joint Electricity Regulatory Commission for the State of Goa and Union Territories thereby maintaining the existing rates for all categories of consumers”*

Cabinet Decision dated 25/03/2021:

**“TABLE ITEM No.2**

*Extension of subsidy to all categories of consumers beyond the period 31st December, 2020 i.e from 1st January, 2021 till 31st March 2021 against the tariff hike as per new Tariff Order issued vide Petition No 21/2019 dated 19th May, 2020 for Electricity Department, Government of Goa by Hon’ble Joint Electricity Regulatory Commission (JERC).*

**DECISION:** *The Council of Ministers resolved for extension of grant of subsidy to all categories of consumers for the period beyond 31st December, 2020 i.e. from 1st January, 2020 to 31st March, 2021 (3 months) to nullify the impact of hike in Tariff Order issued vide Petition No 21/2019 the Joint Electricity Regulatory Commission for the State of Goa and Union Territories.”*

Post issuance of above-mentioned Cabinet Decision of Government of Goa, the Electricity Department, in FY 2020-21 has been levying the Tariff approved by JERC for FY 2019-20 on all consumers. The difference in the revenue was considered as subsidy from the Government to each category of consumer during FY 2020-21, in addition, the Government would provide budgetary support to take over any revenue gap remaining for the year.

The Hon’ble Commission vide its Tariff Order dated 31<sup>st</sup> March 2022 had considered a tariff hike of 1.58 % for FY 2022-23, with the remaining gap to be recovered from Govt’s budgetary support.

Thus, the revenue gap of Rs. 310.37 Cr. arrived at for FY 2022-23 under True Up exercise shall be met by the Government of Goa as per the budgetary support letter issued. The letter has been attached with this Petition as **Annexure-2**.

Hence, the Revenue Gap carried forward to the subsequent financial years has been considered as NIL.

**Table 3-25: Revenue Gap for FY 2022-23 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Actual FY 2022-23
Aggregate Revenue Requirement	2,408.15	2,816.84
Revenue from Tariff including FPPCA	2,024.02	2,506.47
<b>Revenue Gap</b>	<b>384.13</b>	<b>310.37</b>
Less: Budgetary Support from Govt.	<b>384.13</b>	<b>310.37</b>
<b>Net Final revenue Gap to be carry forward</b>	-	-



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In view of the above, the Hon'ble Commission is requested to approve the Revenue Gap for FY 2022-23 as NIL as computed in the above table for the purpose of carrying forward to subsequent years.



#### 4 ANNUAL PERFORMANCE REVIEW FOR FY 2023-24

##### Background to FY 2023-24 Petition

EDG in this chapter submits the performance of each parameter of ARR of FY 2023-24 against the values approved by the Hon'ble Commission in the Tariff Order dated 30<sup>th</sup> March 2023. This chapter summarizes each component of ARR for FY 2023-24 and the Hon'ble Commission is requested to review the performance for FY 2023-24.

##### Performance Review for FY 2023-24

4.1.1 Regulation 12 of the MYT Regulations, 2021 specifies that,

*"12.1 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.*

*12.2 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."*

The Hon'ble Commission had issued the Tariff Order for FY 2023-24 on 30<sup>th</sup> March 2023. For the purpose of ease of reference; the summary of approved ARR vis-à-vis submitted by EDG for FY 2023-24 in the previous filing is reproduced hereunder:

**Table 4-1: ARR approved by JERC for FY 2023-24 (Rs. Cr.)**

S/No	Particulars	As on T.O dated 30 <sup>th</sup> March, 2023	
		Submitted by EDG	Commission's Approved
1.	Power Purchase Cost	2,013.94	2,027.60
2.	O&M Expenses	525.87	529.79
3.	Depreciation	77.75	59.36
4.	Interest and Finance charges	44.86	27.12
5.	Return on Equity	79.88	71.41
6.	Interest on Security Deposit	5.37	5.37



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S/No	Particulars	As on T.O dated 30 <sup>th</sup> March, 2023	
		Submitted by EDG	Commission's Approved
7.	Interest on Working Capital	16.51	12.09
<b>8.</b>	<b>Total Revenue Requirement</b>	<b>2,764.18</b>	<b>2,732.74</b>
9.	Less: Non-Tariff Income (NTI)	29.93	50.21
<b>10.</b>	<b>Net Revenue Requirement</b>	<b>2,734.25</b>	<b>2,682.53</b>

EDG has discussed each of the elements in detail based on the revised estimates for FY 2023-24.

### Energy Sales

The energy sales for H1 (April to September) of FY 2023-24 is 2374.11 MUs. It is submitted that the Hon'ble JERC had approved the overall estimated Sales for FY 2023-24 in its order. For the purpose of Annual Performance Review for FY 2023-24, the figures of sales during first half (H1) of FY 2023-24 are taken from SAP System, and EDG has extrapolated the sales in second half (H2) of FY 2023-24 with respect to actual sales during H1 of FY 2023-24 to arrive at the projections of FY 2023-24 i.e. the base year.

The following table shows the overall Sales considered by EDG for APR of FY 2023-24 vis-à-vis Sales approved in Tariff Order dated 30<sup>th</sup> March 2023.

**Table 4-2: Sales for FY 2023-24 (MUs)**

S/No	Category of Consumer	Approved in T.O dated 30 <sup>th</sup> March, 2023	Actual Sales for H1	Projected Sales for H2	Estimated Total Sales FY 2023-24
<b>A. LOW TENSION SUPPLY</b>					
1.	LTD/Domestic	1,468.06	741.72	627.56	1,369.28
2.	LT-LIG (Low income Group)	0.93	0.50	0.43	0.93
3.	LTC/Commercial	474.02	267.18	253.00	520.18
4.	LTI/ Industrial	86.77	44.09	44.76	88.85
5.	LT Mixed/ LT-P Hotel Industries	3.90	1.59	1.50	3.09
6.	LTAG/LT-AGP (Pump Sets/Irrigation)	14.86	7.87	11.06	18.93
7.	LTAG/LT-AGA (Allied Activities)		0.64	0.90	1.54
8.	LTPL Public lighting	46.27	29.32	20.81	50.13
9.	LT Hoarding /Sign Board	0.27	0.08	0.05	0.14
<b>B. HIGH TENSION SUPPLY</b>					
10.	HTD Domestic	0.37	0.20	0.20	0.40
11.	HTC Commercial	154.98	96.51	97.08	193.59
12.	HTI/Industrial - Connected at 11/33 kV	1,756.68	716.56	741.74	1,458.30



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S/No	Category of Consumer	Approved in T.O dated 30 <sup>th</sup> March, 2023	Actual Sales for H1	Projected Sales for H2	Estimated Total Sales FY 2023-24
13.	HTI/Industrial - Connected at 110 kV		151.74	157.07	308.81
14.	High Tension-Ferro/SM/PI/SR	494.55	267.27	276.67	543.94
15.	HTAG/HT-AGP (Pump Sets/Irrigation)	20.61	2.68	3.45	6.14
16.	HTAG/HT-AGA (Allied Activities)		7.05	9.07	16.12
17.	Military Engineering Services/ Defense Establishments	33.55	17.98	17.76	35.74
C. TEMPORARY SUPPLY					
18.	LT. Temporary Domestic	3.60	1.52	1.76	3.28
19.	LT. Temporary Commercial		11.26	12.97	24.23
20.	HT. Temporary	5.20	2.29	2.64	4.93
D. SINGLE POINT SUPPLY					
21.	Residential Complexes	5.38			
22.	Commercial Complexes		3.31	3.66	6.97
23.	Industrial Complexes				
E. OTHER CATEGORIES					
24.	EV Charging Stations	-	2.73	2.90	5.63
TOTAL		4,570.01	2,374.11	2,287.03	4,661.14

The Hon'ble Commission is requested to approve the revised sales figures considered in the table above for APR of FY 2023-24, which is based on actual sales for first half of the year. The figures for energy sales for FY 2023-24 are provided in Format 5 of Tariff Filing Formats.

### Number of Consumers

The consumer base of Goa comprises HT Industry, LT Industry, Commercial, Domestic, and other category of consumers with the maximum number of consumers attributable to the domestic category. For FY 2023-24, EDG is submitting (H1+H2) overall projected number of consumers in Format 5 of this Petition. The table below shows category-wise number of consumers considered for FY 2023-24 vis-à-vis number of consumers approved by the Hon'ble Commission in Tariff Order for FY 2023-24 dated 30<sup>th</sup> March 2023.

**Table 4-3: Number of Consumers for FY 2023-24 (Nos.)**

S/No	Category of Consumer	Approved in T.O dated 30 <sup>th</sup> March, 2023	Estimated Consumers FY 2023-24
<b>A. LOW TENSION SUPPLY</b>			
1.	LTD/Domestic	5,82,001	5,68,636





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S/No	Category of Consumer	Approved in T.O dated 30 <sup>th</sup> March, 2023	Estimated Consumers FY 2023-24
2.	LT-LIG (Low Income Group)	920	843
3.	LTC/Commercial	1,10,465	1,10,333
4.	LTI/ Industrial	5,681	5,760
5.	LT Mixed/ LT-P Hotel Industries	116	115
6.	LTAG/LT-AGP (Pump Sets/Irrigation)	13,244	12,929
7.	LTAG/LT-AGA (Allied Activities)		326
8.	LTPL Public lighting	6,101	6,941
9.	LT Hoarding /Signboard	65	73
B. HIGH TENSION SUPPLY			
10.	HTD Domestic	4	5
11.	HTC Commercial	334	343
12.	HTI/Industrial - Connected at 11/33kV	838	815
13.	HTI/Industrial - Connected at 110 kV		7
14.	High Tension-Ferro/SM/PI/SR	23	23
15.	HTAG/HT-AGP (Pump Sets/Irrigation)	47	45
16.	HTAG/HT-AG (Allied Activities)		3
17.	Military Engineering Services/ Defense Establishments	14	14
C. TEMPORARY SUPPLY			
18.	LT. Temporary Domestic	5,004	1,943
19.	LT. Temporary Commercial		3,460
20.	HT. Temporary	15	17
D. SINGLE POINT SUPPLY			
21.	Residential Complexes	1	-
22.	Commercial Complexes		1
23.	Industrial Complexes		-
E. OTHER CATEGORIES			
24.	Electric Vehicle Charging Station	-	10
TOTAL		7,24,872	7,12,643

The Hon'ble Commission is requested to approve number of consumers for APR of FY 2023-24 as submitted in the above table. The figures for number of consumers for FY 2023-24 are provided in Format 5 of Tariff Filing Formats.

### Connected Load

EDG has estimated the Connected Load in line with the principles adopted for the number of consumers for entire FY 2023-24. Category-wise Connected Load considered for APR of FY 2023-24 vis-à-vis Connected Load approved by the Hon'ble Commission in Tariff Order for FY 2023-24 dated 30<sup>th</sup> March 2023 is provided in the table given below.



**Table 4-4: Connected Load for FY 2023-24 (kW)**

S/No	Category of Consumer	Approved in T.O dated 30 <sup>th</sup> March, 2023	Estimated Load FY 2023-24
A. LOW TENSION SUPPLY			
1.	LTD/Domestic	19,33,855	18,88,765
2.	LT-LIG (Low income Group)	89	93
3.	LTC/Commercial	4,38,969	4,45,334
4.	LTI/ Industrial	1,17,717	1,18,169
5.	LT Mixed/ LT-P Hotel Industries	2,675	2,409
6.	LTAG/LT-AGP (Pump Sets/Irrigation)	38,774	37,081
7.	LTAG/LT-AGA (Allied Activities)		1,926
8.	LTPL Public lighting	12,854	15,233
9.	LT Hoarding /Signboard	513	561
B. HIGH TENSION SUPPLY			
10.	HTD Domestic	394	481
11.	HTC Commercial	96,449	1,19,883
12.	HTI/Industrial - Connected at 11/33kV	5,46,123	4,94,440
13.	HTI/Industrial - Connected at 110 kV		70,851
14.	High Tension-Ferro/SM.PI/SR	1,08,868	1,09,012
15.	HTAG/HT-AGP (Pump Sets/Irrigation)	11,106	11,195
16.	HTAG/HT-AG (Allied Activities)		2,271
17.	Military Engineering Services/ Defence Establishments	8,086	9,144
C. TEMPORARY SUPPLY			
18.	LT. Temporary Domestic	19,815	4,758
19.	LT. Temporary Commercial		20,098
20.	HT. Temporary	3,751	3,300
D. SINGLE POINT SUPPLY			
21.	Residential Complexes	2,500	-
22.	Commercial Complexes		2400
23.	Industrial Complexes		-
E. OTHER CATEGORIES			
24.	Electric Vehicle Charging Station	-	388
Total		33,42,540	33,57,790

The Hon'ble Commission is requested to approve the Connected Load for APR of FY 2023-24 as submitted in the above table. The details of Connected Load for FY 2023-24 are provided in Format 5 of Tariff Filing Formats.



## Energy Requirement & T&D Loss for FY 2023-24

**Inter-State Transmission Losses:** PGCIL losses are on account of two regions, Western region (WR) and Southern Region (SR). The Petitioner has considered the actual Transmission Losses of FY 2023-24 H1 for FY 2023-24. Accordingly, Inter-State Transmission Losses for FY 2023-24 have been considered as under:

**Table 4-5: Inter-State Transmission Losses for FY 2023-24 (%)**

Particulars	Approved in T.O dated 30 <sup>th</sup> March, 2023		Actual H1 (April-September)		FY 2023-24 (Revised Estimate)
	WR	SR	WR	SR	Total
Inter-State Transmission Loss (%)	2.89	6.97	3.11	4.21	<b>3.29</b>

**Distribution Loss for FY 2023-24:** The Hon'ble Commission has approved distribution loss of 8.20% for FY 2023-24 in the Tariff Order dated 30<sup>th</sup> March 2023. For H1 of FY 2023-24, the actual distribution loss was 8.37%. However, for the projections for FY 2023-24, the actual Distribution loss of 7.41 % arrived for FY 2022-23 has considered. EDG has projected Power purchase requirement for FY 2023-24 considering same Distribution Loss level of 7.41 % for entire FY 2023-24.

EDG submits that, for projection of power from tied-up capacity, it has taken into consideration the H1 figures, since, there is no change in capacity. For projecting the energy availability for FY 2023-24, EDG has considered the actual power purchase quantum for first half of FY 2023-24 and projected the energy availability for second half of FY 2023-24.

Further, w.r.t total Power Purchase requirement for FY 2023-24, after considering projected Sales and Distribution losses of 7.41%, EDG has also considered the purchase of Short-Term power from IEX for Off-peak and Peak period as per FY 2023-24 H1 and computed the sale of excess power available for FY 2023-24 H2, respectively.

Percentage Allocation of firm as well as of unallocated quota from the CGS has been considered as per the allocation obtained from WRPC/Comml-I/6/Alloc/2023/12459 dated 3<sup>rd</sup> November 2023 and SRPC Allocation Circular No: SRPC/SE(O)/54/UA/2023-24/ dated 27<sup>th</sup> September 2023.

EDG submits that it has considered auxiliary consumption for each of the central generating station as per the CERC Tariff Order.

Inter-State Transmission Loss of 3.11% and 4.21% has been considered for power purchase through Western and Southern region, respectively, as per actuals.

Based on the above assumptions, EDG has estimated the power purchase quantum from CGS stations.

With respect to purchase/sale of power from IEX/Traders, EDG has considered the actual purchase of 238.43 MUs and sale of 104.21 MUs of FY 2023-24 H1.



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EDG has also considered the power received through banking from GMR Energy Trading Limited, Manikaran Power Limited, and Arunachal Pradesh Power Corporation Limited (APPCPL).

To meet any shortfall, if it occurs, EDG purchases power through Short term (Traders). For FY 2023-24, EDG has purchased 238.43 MUs from Traders/Exchange at a rate of Rs. 7.30/unit (average). For FY 2023-24 H2 EDG is surplus in the power and the surplus will be sold at market rate.

EDG, while computing Energy Balance for entire FY 2023-24, has considered the actual over-drawal/under-drawal only during first half of FY 2023-24. Thus, based on the foregoing paragraphs, the Energy Balance for FY 2023-24 is shown in the table below:

**Table 4-6: Energy Balance for FY 2023-24 (MUs) (Periphery-wise)**

Particulars	FY 2023-24 (H1)			FY 2023-24 (H2)	FY 2023-24 (H1+H2)
	WR	SR	Total	Total	Total
<b>Energy Input at Goa Periphery</b>	<b>2,114.73</b>	<b>413.43</b>	<b>2,528.17</b>	<b>2,373.07</b>	<b>4,901.23</b>
<b>Total Power Scheduled/ Purchased at Goa Periphery</b>					
Total Scheduled Billed Drawal - CGS	1,727.78	337.69	2,065.48	2,143.92	4,209.40
Add: Over-drawal	19.65	11.24	30.89	-	30.89
Add: Power purchase from NVVN / Banking	(71.74)	-	(71.74)	(0.65)	(72.39)
Add: Power purchase from Traders / Open Market	152.17	86.27	238.43	-	238.43
Add : Hydro Power	-	-	-	-	-
Less: Under-drawal	2.30	3.58	5.88	-	5.88
Add: Renewable Power	461.25	-	461.25	402.68	863.93
Less: Power diverted to Exchange	104.21	-	104.21	89.07	193.28
<b>Total</b>	<b>2,182.60</b>	<b>431.62</b>	<b>2,614.22</b>	<b>2,456.88</b>	<b>5,071.10</b>
<b>PGCIL Losses - MUs</b>	<b>67.87</b>	<b>18.18</b>	<b>86.06</b>	<b>83.81</b>	<b>169.87</b>
<b>PGCIL Losses - %</b>	<b>3.11%</b>	<b>4.21%</b>	<b>3.29%</b>	<b>3.29%</b>	<b>3.29%</b>
<b>Total Power Purchased within Goa State</b>					
Add: Co-generation	60.52		60.52	62.52	123.04
Add: Independent Power Producers (IPP)	-	-	-	-	-
Add: Net Metering	-	-	-	-	-
Add: PM KUSUM	-	-	-	-	-
Add: Hindustan Waste Treatment Plant	2.26	-	2.26	7.74	10.00
<b>Total</b>	<b>62.78</b>	<b>-</b>	<b>62.78</b>	<b>70.26</b>	<b>133.04</b>



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Particulars	FY 2023-24 (H1)			FY 2023-24 (H2)	FY 2023-24 (H1+H2)
	WR	SR	Total	Total	Total
<b>Total Power Purchase availability after PGCIL Losses</b>	<b>2,177.51</b>	<b>413.43</b>	<b>2,590.94</b>	<b>2,443.33</b>	<b>5,034.27</b>
<b>Power Purchase required (MU)</b>			<b>2,590.94</b>	<b>2,443.33</b>	<b>5,034.27</b>
Less: Retail Sales to Consumers	2,374.11		2374.11	2,287.03	4,661.14
Distribution Losses - MUs			216.83	156.30	373.13
<b>Distribution Losses - %</b>			<b>8.37%</b>	<b>6.40%</b>	<b>7.41%</b>

Table 4-7: Energy Balance for FY 2023-24 (MUs)

S/No	Particulars	FY 2023-24 (APR)		
		(H1)	(H2)	(H1+H2)
<b>A)</b>	<b>ENERGY REQUIREMENT</b>			
1.	Energy sales to metered category within the State	2,374.11	2,287.03	4,661.14
2.	Total sales within the State	2,374.11	2,287.03	4,661.14
3.	Distribution Losses (MU)	216.83	156.30	373.13
4.	Distribution Losses (%)	8.37%	6.40%	7.41%
5.	Energy required at DISCOM Periphery	2,590.94	2,443.33	5,034.27
6.	Intra-State Transmission Losses	-	-	-
7.	Energy Required at State Periphery for own sale	<b>2,590.94</b>	<b>2,443.33</b>	<b>5,034.27</b>
8.	Sales to common pool consumers	5.88	-	5.88
9.	Sales outside state	104.21	89.07	193.28
10.	<b>Total Energy Requirement at State Periphery</b>	<b>2,480.85</b>	<b>2,354.26</b>	<b>4,835.11</b>
<b>B)</b>	<b>ENERGY AVAILABILITY</b>			
1.	Availability from firm sources outside state	2,454.99	2,545.95	5,000.94
2.	Availability from UI Over-drawal/ Under-drawal	25.01	-	25.01
3.	Net Purchase from open market	134.22	(89.07)	45.15
4.	<b>Total Availability of Energy from outside the state</b>	<b>2,614.22</b>	<b>2,456.88</b>	<b>5,071.10</b>
5.	<b>PGCIL Losses – MUs</b>	<b>86.06</b>	<b>83.81</b>	<b>169.87</b>
6.	<b>PGCIL Losses - %</b>	<b>3.29%</b>	<b>3.29%</b>	<b>3.29%</b>
7.	<b>Total Availability of Energy at State Periphery from outside state after Interstate Losses</b>	<b>2,528.17</b>	<b>2,373.07</b>	<b>4,901.23</b>
8.	Availability from firm sources inside the state	62.78	70.26	133.04
9.	<b>Total Availability of Energy for the State</b>	<b>2,590.94</b>	<b>2,443.33</b>	<b>5,034.27</b>
10.	<b>Surplus / (Deficit)</b>	-	-	-

The Hon'ble Commission is requested to approve the Energy Balance for FY 2023-24 as computed in the above table. The energy requirement and source wise power purchase details are discussed in subsequent paragraphs. The details of energy Balance for FY 2023-24 (Annual)



are provided in Format 6 of Tariff Filing Formats.

## Power Purchase Quantum & Cost for FY 2023-24

### Power Purchase Cost for FY 2023-24 H1:

EDG meets its total energy requirement from its allocation from the Central Generating Stations (CGS), State-based Co-generation facilities, Power Exchanges etc. EDG receives power from CGS like NTPC and NPCIL as per allocation from time to time. The power purchases from other sources such as Co-generation has been considered as per respective PPAs. Also, Renewable Power has been procured from NVVNL, SECI, Manikaran Power, APPCPL and Hindustan Waste Treatment Plant.

The below table shows the summary of Power Purchase (at Goa periphery) from various sources along with their costs for H1 of FY 2023-24 including Transmission Charges, Banking, Over-drawal and purchase from traders:

**Table 4-8: Power Purchase Summary FY 2023-24 H1**

S/No	Particulars	Gross Purchase	Cost	Rate
		(MUs)	(Rs. Cr.)	(Rs./kWh)
1.	NTPC	1,929.20	706.83	3.66
2.	NPCIL	136.28	72.99	5.36
3.	IEX (Net of Purchase & Sales)	82.39	81.41	-
	IEX Purchase (Peak Hrs)	186.60	119.82	6.42
	IEX Sale (Off Peak Hrs)	104.21	38.41	3.69
4.	Traders (Net of Drawal & Injection)	51.83	54.44	-
5.	UI (Net Over-drawal)	25.01	27.85	11.13
6.	Co-Generation	60.52	14.43	2.38
7.	Renewable	463.51	204.77	4.42
8.	Transmission Charges	-	152.74	-
9.	Banking of Power (Net)	(71.74)	0.25	-
	<b>TOTAL</b>	<b>2,677.00</b>	<b>1,315.71</b>	<b>4.91</b>

For FY 2023-24, Rebates received by EDG for the timely payment of the cost of power purchase to the respective sources/generators like NTPC, NPCIL, Vedanta, NVVNL, and SECI have been considered under Non-Tariff Income and the same has been deducted from the overall revenue requirement for FY 2023-24.

EDG submits that the Department is required to pay the arrear bill amounting to Rs. 71.40 Crore in 12 equal monthly instalments to NPCIL due to the revision in tariff rates of Kakrapar Atomic Power Station- 1&2 from September 2018 to April 2023. The letter no. KAPS/ACTS/EB/2324/ dated 04.07.2023 by NPCIL (attached in **Annexure-5** of this petition) to the EDG conveys certain conditions to which EDG has been obliging and have started the monthly instalments since June, 2023 and will pay the instalments till the month of April, 2024 with Rs. 6 Crore every month along with the remaining amount of Rs. 5.40 Crore in the month of May, 2024.



Further, EDG submits that during FY 2022-23 the power purchase from Hindustan Waste Treatment Plant was considered on the basis of the accounts as discussed in the True-up section. For current period, i.e., FY 2023-24, the remaining amount has been adjusted as per the date of actual payment released by EDG. However, for the purpose of APR the actual bills are considered for the Power Purchase.

The source-wise details of Power Purchase Quantum and its cost are covered in Format 3 of the Tariff Filing Formats.

EDG on a real time basis has also overdrawn/ underdrawn power from grid. Reactive charges have been adjusted in the over-drawal and under-drawal charges. The details of the same for FY 2023-24 H1 are provided in the table given below:

**Table 4-9: DSM Power (Over-drawl & Under-drawl) Charges for H1 of FY 2023-24**

Month	Over-drawl		Under-drawl		Net Drawal	
	(Rs. Crore)	(MUs)	(Rs. Crore)	(MUs)	(Rs. Crore)	(MUs)
April	8.04	7.39	0.00	0.00	8.04	7.39
May	4.16	4.10	0.24	0.57	3.92	3.53
June	7.68	7.51	0.04	0.91	7.64	6.60
July	0.97	0.36	7.62	4.18	(6.66)	-3.83
August	6.86	5.25	0.00	0.00	6.86	5.25
September	8.11	6.28	0.07	0.21	8.05	6.07
<b>Total</b>	<b>35.81</b>	<b>30.89</b>	<b>7.97</b>	<b>5.88</b>	<b>27.85</b>	<b>25.01</b>

**Transmission Charges for FY 2023-24 of H1:** The transmission charges for the H1 of FY 2023-24 comprises transmission charges for Western Region and Southern Region. The Transmission charges comes to around Rs. 152.74 Cr. The same is considered for FY 2023-24 H2 resulting in total cost of Rs. 305.48 Cr.

**Power Purchase Fixed Cost for FY 2023-24:** As CERC has still not issued the Order for the Control Period for most of the Plants, EDG has considered actual fixed charges paid to the power plants in H1 of FY 2023-24 to arrive at the revised projections of FY 2023-24 for respective Central Generating Stations.

**Power Purchase Variable Cost for FY 2023-24:** The Petitioner has considered the actual variable cost incurred in H1 of FY 2023-24. As there is no huge variation in the energy charges, the actual per unit variable costs for H1 of FY 2023-24 has been considered for H2.

### Power Purchase from Renewable Energy Sources:

**Solar RPO:** In order to meet the Solar RPO, EDG in FY 2023-24 has purchased renewable energy from SECI, NVVNL and through STOA from APPCPL and Manikaran.

Further, EDG is also expecting the consumers to go for solar rooftops under the Net Metering/ Gross Metering arrangement. The total Cumulative installed capacity including all types of rooftop solar and ground mounted solar as on 30<sup>th</sup> November 2023 within Goa is 52.12 MW of



which, Rooftop is 36.75 MW and Ground Mounted is 15.37 MW. Here, based on the past performances of the Consumers most of the consumers having Net-Metering setup has consumed the entire generation and further drawn power from EDG Network. In this regard, EDG has considered 63.08 MUs of energy from the Net Metering Consumers in the RPO for self-consumption without injecting into the grid. As the actual Net-Metering settlement is performed in the end of the year, the units generated and injected will be accounted in the True-up accordingly for FY 2023-24.

**Non-Solar RPO:** To meet Non-Solar RPO, EDG has procured power from SECI on Long-Term Basis, Manikaran on short-term basis and Hindustan Waste Treatment Plant.

EDG submits that it would be able to meet Solar and Non-Solar RPO in FY 2023-24 (as per the Power purchase projections) of the applicable Solar and Non-Solar RPO target.

Further, EDG has been procuring Hydro power from Bajoli Hydro Plant in the form of the Banking arrangements (Power Swapping) through the trader - GMR Trading Limited since July, 2023 onwards. This arrangement is also helpful in fulfilling the HPO.

EDG has signed Power purchase Agreement with SECI 150 MW RTC Peak Power from Hybrid source of Renewable Power comprising Solar, Wind and Battery Energy Storage System (BESS), which provides assured Peak Power to compensate the Peak Deficit of Goa. The project contributes to Peak Power compensation and RPO as well. The project envisages the supply of 200 MUs/year of wind capacity only, to start from March 2024 onwards at the rate of Rs 4.03 /unit at Goa periphery as per the PPA. Hence, the expected power purchase for the month of March has also been taken into consideration for the projection of FY 2023-24 H2.

The details of the Solar and Non-Solar RPO Status for FY 2023-24 as per the Power Purchase considered are given in the table below:

**Table 4-10: Solar & Non-Solar RPO Status for FY 2023-24**

S/No	Description	Unit	Revised Projections
			FY 2023-24
1.	Sales Within State	MUs	4,661.14
2.	RPO	%	19.91%
	- Solar	%	10.00%
	- Non Solar	%	9.25%
	- HPO	%	0.66%
3.	RPO	MUs	928.03
	- Solar	MUs	466.11
	- Non Solar	MUs	431.16
	- HPO	MUs	30.76
4.	Power Purchase (With REC)	MUs	1,090.10
	- Solar	MUs	477.60*
	- Non Solar	MUs	584.57
	- HPO	MUs	27.93
5.	Power Purchase (Without REC)	MUs	960.28
	- Solar	MUs	347.77*
	- Non Solar	MUs	584.57





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S/No	Description	Unit	Revised Projections
			FY 2023-24
	- HPO	MUs	27.93

\*This includes 75.69 MUs of self-Consumption of the Net-Metering Consumers.

### Renewable Energy Certificate (REC):

EDG has made an extensive effort in fulfilling the RPO targets for FY 2023-24 mainly by purchase of physical power. EDG purchases RECs (subject to the availability) to compensate for any shortfall in the RPO.

For FY 2023-24, EDG has to procure RECs to fulfil 85% of the Target, so that EDG can utilize the fungibility approach as per the Regulations. The remaining Solar RPO shortfall can be achieved by adjusting with extra Non-Solar power and the remaining excess Non-Solar RPO after adjustment with Solar RPO deficit can be used to adjust the HPO shortfall. Even after availing the fungibility, there is some excess Non-Solar RPO available to be carried forward to next year.

### RPO working for REC requirement:

After calculating the deficit of 129.83 MU of Solar RPO to achieve the 85% target, the RECs to be purchased is derived as under:

**Table 4-11 Solar RPO working for FY 2023-24**

S/No	REC requirement Calculation	MU
1.	Total Solar RPO target for FY 2023-24	561.88
2.	85% of Solar RPO Target <b>(1*85%)</b>	477.60
3.	Solar power procurement as of 2nd Qtr FY 2023-24	186.35
4.	Anticipated Solar Power for 3rd and 4th Qtr	161.42
5.	Total anticipated Solar Power for FY 2023-24 <b>(3+4)</b>	347.77
6.	Deficit to meet the 85% of Target <b>(2-5)</b>	129.83
7.	RECs to be purchased <b>(=6)</b>	<b>129.83</b>
8.	Rest Solar RPO Shortfall to be achieved by adjusting with extra Non Solar power <b>(1-(5+6))</b>	84.28
9.	Surplus Non-Solar RPO to be adjusted with Solar	(145.13)
10.	Solar RPO to be achieved	0.00

**Table 4-12 Non-Solar RPO working for FY 2023-24**

S/No	REC requirement Calculation	MU
1.	Total Non-Solar RPO target for FY 2023-24	439.44
2.	85% of Solar RPO Target <b>(1*85%)</b>	373.53



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S/No	REC requirement Calculation	MU
3.	Non-Solar power procurement as of 2nd Qtr FY 2023-24	320.10
4.	Anticipated Non-Solar Power for 3rd and 4th Qtr	264.47
5.	Total anticipated Non-Solar Power for FY 2023-24 <b>(3+4)</b>	584.57
6.	Deficit (+)/Surplus (-) to meet the 85% of Target <b>(2-5)</b>	(211.04)
7.	Deficit (+)/Surplus (-) <b>(1-5)</b>	(145.13)
8.	RECs purchase to be purchased	-
9.	Non-Solar RPO surplus to be adjusted with Solar RPO and HPO <b>(1-(5+8))</b>	(145.13)
10.	Surplus Non-Solar RPO to be adjusted with Solar	84.28
11.	Balance Non-Solar RPO after adjustment with Solar RPO Deficit	(60.84)

For HPO compliance, the remaining Non-Solar RPO as mentioned in the table after adjustment with Solar RPO deficit can be used to adjust the HPO shortfall.

**Table 4-13 HPO working for FY 2023-24**

S/No	REC requirement Calculation	MU
1.	Total HPO target for FY 2023-24	30.62
2.	85% of Solar RPO Target <b>(1*85%)</b>	26.03
3.	HPO power procurement as of 2nd Qtr FY 2023-24	27.93
4.	Anticipated Hydro Power for 3rd and 4th Qtr	0
5.	Total anticipated Hydro Power for FY 2023-24 <b>(3+4)</b>	27.93
6.	Deficit (+)/Surplus (-) to meet the 85% of Target <b>(2-5)</b>	(1.91)
7.	Deficit (+)/Surplus (-) <b>(1-5)</b>	2.69
8.	RECs purchase to be purchased	-
9.	Rest HPO Shortfall to be achieved by adjusting with extra Non Solar power <b>(1-(5+8))</b>	2.69
10.	Remaining Non-Solar RPO after adjustment with Solar RPO Deficit	(60.84)
11.	HPO to be achieved	0.00
12.	Balance Non-Solar RPO after adjustment with HPO Deficit <b>(9+10)</b>	(58.16)

The remaining 58.16 MU of Non-Solar RPO after adjustment with HPO shall be carried forward to the next year.

The status for RPO compliance with and without considering the purchase of RECs in FY 2023-24 is given in the table below:



Table 4-14 RPO & REC Status for FY 2023-24

Particulars	Approved in T.O dated 30 <sup>th</sup> March, 2023	Revised Projections FY 2023-24	
		Without REC	With REC
<b>Sales within State (MU)</b>	<b>4,540.30</b>	<b>4,661.14</b>	<b>4,661.14</b>
Hydro Power available at State Periphery (MU)	-	-	-
Distribution Loss	8.20%	7.41%	7.41%
Resultant Energy Sales for calculation of RPO (after adjustment of power from hydro sources) (MU)	<b>4,540.30</b>	<b>4,661.14</b>	<b>4,661.14</b>
<b>RPO (in %)</b>	<b>19.91%</b>	19.91%	19.91%
Solar	10.00%	10.00%	10.00%
Non-Solar	9.91%	9.25%	9.25%
HPO	-	0.66%	0.66%
<b>RPO for the year (in MU)</b>	<b>903.97</b>	<b>928.03</b>	<b>928.03</b>
Solar	454.03	466.11	466.11
Non-Solar	449.94	431.16	431.16
HPO	-	30.76	30.76
<b>Backlog RPO from previous year (in MU)</b>	-	<b>103.91</b>	<b>103.91</b>
Solar	-	95.76	95.76
Non-Solar	-	8.29	8.29
HPO	-	(0.14)	(0.14)
<b>Cumulative RPO Target for the year (in MU)</b>	-	<b>1031.94</b>	<b>1031.94</b>
Solar	-	561.88	561.88
Non-Solar	-	439.44	439.44
HPO	-	30.62	30.62
<b>RPO Compliance from Physical Power (MU)</b>	<b>852.81</b>	<b>960.28</b>	<b>1,090.10</b>
Solar	322.69	347.77	477.60
Non-Solar	530.13	584.57	584.57
HPO	-	27.93	27.93
<b>Standalone RPO Compliance Backlog (MU)</b>	<b>51.16</b>	<b>71.67</b>	<b>(58.16)</b>
Solar	131.34	214.11	84.28
Non-Solar	(80.18)	(145.13)	(145.13)
HPO	-	2.69	2.69
<b>Cumulative RPO Compliance Backlog (MU)</b>	<b>318.22</b>	<b>71.67</b>	<b>(58.16)</b>
Solar	307.51	214.11	84.28
Non-Solar	10.71	(145.13)	(145.13)
HPO	-	2.69	2.69

**Power Purchase Cost for FY 2023-24:**



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In line with the foregoing paragraphs, the total estimated Power Purchase Quantum & Cost for FY 2023-24 as well as that approved by the Hon'ble Commission in Tariff Order dated 30<sup>th</sup> March 2023 is summarized in the table below:

**Table 4-15: Power Purchase Summary for FY 2023-24**

Particulars	Approved in T.O dated 30 <sup>th</sup> March, 2023			Revised Projections for FY 2023-24		
	Gross Purchase	Cost	Rate	Gross Purchase	Cost	Rate
	(MUs)	(Rs. Cr.)	(Rs./kWh)	(MUs)	(Rs. Cr.)	(Rs./kWh)
<b>NTPC</b>	3,832.96	1,291.96	3.37	3,974.08	1,350.19	3.40
<b>NPCIL</b>	224.80	66.01	2.94	235.32	146.27	6.22
<b>IEX (Net of Purchase and Sales)</b>	(105.41)	(46.45)	-	(6.68)	48.59	-
<i>IEX Purchase (Peak Hrs)</i>	-	-	-	186.60	119.82	6.42
<i>IEX Sale (Off Peak Hrs)</i>	105.41	46.45	4.41	193.28	71.24	3.69
<b>Traders (Net of Drawal &amp; Injection)</b>	-	-		51.83	54.44	10.50
<b>UI (Net Over-drawal)</b>	-	-		25.01	27.85	11.13
<b>Co-Generation</b>	180.37	43.29	2.40	123.04	29.43	2.39
<b>Renewable</b>	852.81	355.32	4.17	873.93	375.22	4.29
<b>Transmission Charges</b>	-	303.70	-	-	305.48	-
<b>Banking of Power (Net)</b>	(7.32)	0.35	-	(72.39)	0.25	-
<b>TOTAL</b>	<b>4,978.22</b>	<b>2,027.60</b>	<b>4.07</b>	<b>5,204.13</b>	<b>2,337.72</b>	<b>4.49</b>

It is submitted that net power purchase at State periphery is 5,204.13 MU with total power purchase cost of Rs. 2,337.72 Cr. and the average power purchase cost works out to Rs. 4.49/kWh against approved net power purchase cost of Rs. 4.07/kWh for FY 2023-24.

The power purchase details for entire FY 2023-24 are provided in Tariff Filing Format-3.

It is requested to the Hon'ble Commission to approve the Power purchase cost including Transmission charges for FY 2023-24 as detailed in tables given above.

### **Operation & Maintenance Expenses**

Operation & Maintenance Expenses consists of three elements, viz., Employee Expenses, A&G Expenses and R&M Expenses:

- Employee expenses
- Administrative and General
- Repairs and Maintenance Expenses.

Employee Expenses for FY 2023-24:

Actual employee expenses for FY 2023-24 H1 is Rs. 242.14 Cr. EDG has projected normative Employee Expenses for FY 2023-24 H2 at Rs. 180.35 Cr.



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The estimated Employee expenses for FY 2023-24 are shown in the following Table:

**Table 4-16: Actual and Projected Employee expenses of FY 2023-24 (Rs. Crore)**

S/No	Particulars	FY 2023-24	
		Approved in T.O dated 30 <sup>th</sup> March, 2023	Estimated APR FY 2023-24
<b>A</b>	<b>Employee Cost (Other than covered in 'C'&amp;'D')</b>		
1.	Salaries		243.88
2.	Dearness Allowance (DA)		95.57
3.	Other Allowances+ HRA		41.07
4.	Interim Relief / Wage Revision		
5.	Overtime		
6.	Bonus		
7.	Generation Incentive		
8.	Any Other Item (specify)		
	<b>Sub Total</b>		<b>380.52</b>
<b>B</b>	<b>Other Costs</b>		
1.	Medical Expenses Reimbursement		0.27
2.	Travelling Allowance (Conveyance Allowance)		12.76
3.	Leave Travel Assistance		
4.	Payment Under Workman's Compensation Act		
5.	Electricity Concession to Employees		
6.	Other Staff Welfare Expenses		
7.	Any Other Item (specify)		
	<b>Sub Total</b>		<b>13.03</b>
<b>C</b>	<b>Apprentice and Other Training Expenses</b>		
	<b>Total (A+B+C)</b>	<b>443.52</b>	<b>393.55</b>
<b>D</b>	<b>Contribution to Terminal Benefits</b>		
1.	Earned Leave Encashment		
2.	Provident Fund Contribution(NPS)		28.94
3.	Provision for PF Fund		
4.	Pension		
5.	Gratuity		
6.	Ex-gratia		
7.	Any Other Item (specify)		
	<b>Sub Total</b>	<b>3.73</b>	<b>28.94</b>
<b>E</b>	<b>Grand Total (A+B+C+D)</b>	<b>447.25</b>	<b>422.49</b>
<b>F</b>	Employee Expenses Capitalized		
<b>G</b>	<b>Net Employee Expenses (E)-(F)</b>	<b>447.25</b>	<b>422.49</b>

A&G Expenses:



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The Provisional Actual A&G expenses of FY 2023-24 H1 is Rs. 11 Cr. The estimated A&G expenses for FY 2023-24 are shown in the following table:

**Table 4-17: Actual and Projected A&G expenses for FY 2023-24 (Rs. Crore)**

S/No	Particulars		FY 2023-24	
			Approved in T.O dated 30 <sup>th</sup> March, 2023	Estimated APR FY 2023-24
<b>A.</b>				
1.	Lease/ Rent			1.30
2.	Insurance			
3.	Revenue Stamp Expenses Account			
4.	Telephone, Postage, Telegram & Telex Charges			0.14
5.	Incentive & Award to Employees/Outsiders			
6.	Consultancy Charges			
7.	Technical Fees			
8.	Other Professional Charges			3.28
9.	Conveyance and Travelling Expenses			0.26
10.	License and Registration Fees			
11.	Vehicle Expenses (Other Than Trucks and Delivery Vans)	Vehicles Running Expenses		
		Petrol and Oil		
		Hiring of Vehicles		
12.	Security / Service Charges Paid to Outside Agencies			
<b>Sub Total 'A' (1 to 12)</b>				<b>4.98</b>
<b>B. Other Charges</b>				
1.	Fee and Subscription for Books and Periodicals			
2.	Printing and Stationery Expenses			1.47
3.	Advertisement Expenses (Other than Purchase Related) Exhibition & Demo.			0.56
4.	Contributions/Donations to Outside Institutes / Associations			
5.	Electricity Charges of Offices			0.87
6.	Water Charges			0.22
7.	Entertainment Charges			0.005
8.	Miscellaneous Expenses (Sub Total '8')			2.55
	<i>i. Wages</i>			<i>0.36</i>
	<i>ii. Outsourcing of DEOs/Steno and other services</i>			
	<i>iii. Outsourcing of utility attendant</i>			<i>0.95</i>
	<i>iv. Maintenance of IT equipments/machinery</i>			<i>0.47</i>
	<i>v. Maintenance of Non-IT equipments/machinery</i>			
	<i>vi. Maintenance of cars and other vehicles</i>			
	<i>vii. Other Administrative expenditure</i>			
	<i>viii. Procurement of IT expenses</i>			<i>0.14</i>



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S/No	Particulars	FY 2023-24	
		Approved in T.O dated 30 <sup>th</sup> March, 2023	Estimated APR FY 2023-24
	ix. Exhibition /flair expenses		
	x. Furniture expenses		0.64
9.	Office expenses		21.87
10.	Other Charges		9.73
11.	Minor works		0.02
<b>Sub-Total 'B' (1 To 11)</b>			<b>37.30</b>
<b>C. Legal Fee/Charges</b>			
<b>D. Auditor's Fee</b>			
<b>E. Material Related Expenses</b>			
1.	Freight on Capital Equipments		
2.	Purchase Related Advertisement Expenses		
3.	Vehicle Running Expenses Truck / Delivery Van		
4.	Vehicle Hiring Expenses Truck / Delivery Van		
5.	Other Freight		
6.	Transit Insurance		
7.	Octroi		
8.	Incidental Stores Expenses		
9.	Fabrication Charges		
	Minor works		
<b>Sub Total 'E' (1 To 9)</b>			
<b>F. Direction And Supervision Charges</b>			
<b>G. Annual License fee and tariff determination fee payable to JERC</b>			
<b>Grand Total (A To G)</b>		<b>33.61</b>	<b>42.30</b>
<b>H. Total Charges Chargeable To</b>		<b>Total Charges</b>	
		<b>Capital Works (-)</b>	
		<b>Revenue Expenses</b>	

R&M Expenses:

The Provisional actual Repair and Maintenance expenses of FY 2023-24 H1 is Rs. 33.66 Cr. The estimated R&M expenses for FY 2023-24 H2 are shown in the following Table:

**Table 4-18: Actual and Projected R&M expenses for FY 2023-24 (Rs. Crore)**

S/No	Particulars	FY 2023-24	
		Approved in T.O dated 30 <sup>th</sup> March, 2023	Estimated APR FY 2023-24
1.	Plant and Machinery		38.06
	- 220 kV Sub-Station		



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S/No	Particulars	FY 2023-24	
		Approved in T.O dated 30 <sup>th</sup> March, 2023	Estimated APR FY 2023-24
	- 110 kV Sub-Station		
	- 33kV Sub-Station		
	- 11kV Sub-Station		
	- Switchgear and cable connections		
	- Others.		
2.	Building		4.92
	- Repairs and maintenance of transformers		
	- Maintenance & repairs of electrical residential and non-residential buildings.		4.92
3.	Civil Works		
4.	Hydraulic Works		
5.	Lines, Cables, Networks etc.		
	- 220 kV Sub-Station		
	- 110 kV Sub-Station		
	- 33kV Lines		
	- 11kV Lines		
	- LT Lines		
	- Others.		
6.	Vehicles		19.06
7.	Furniture and Fixtures		
8.	Office Equipment		
9.	Station Supplies		
10.	Metering Equipment		0.23
11.	Any Other Item		
A	<b>Gross R&amp;M Expenses</b>	<b>48.93</b>	<b>62.27</b>
B	R&M Expenses Capitalised		
12.	<b>Net R&amp;M Expenses</b>	<b>48.93</b>	<b>62.27</b>

O&M Expenses Summary for FY 2023-24:

The estimated O&M expenses for FY 2023-24 vis-à-vis that approved by the Hon'ble Commission is shown in the table below:

**Table 4-19: O&M Expenses for FY 2023-24 (Rs. Cr.)**

Particulars	Approved in T.O dated 30 <sup>th</sup> March, 2023	Estimated APR FY 2023-24
Employee Expenses	447.24	422.49





Particulars	Approved in T.O dated 30 <sup>th</sup> March, 2023	Estimated APR FY 2023-24
A&G Expenses	33.61	42.30
R&M Expenses	48.93	62.27
<b>Total O&amp;M Expenses</b>	<b>529.79</b>	<b>527.06</b>

The Hon'ble Commission is requested to approve the O&M Expenses as shown in the table above.

### Capital Expenditure and Capitalization

EDG has planned to carry out the Capital Expenditure and Capitalisation during FY 2023-24 for augmentation and expansion of its capacity and to reduce the transmission and distribution loss in the system. The main objective is to provide reliable and efficient system. EDG, on its petition for Business Plan for control period FY 2022-23 to FY 2024-25 submitted the details of the existing and new schemes/projects to the Hon'ble JERC.

Further, some new schemes were introduced in the year ending of FY 2022-23 and during FY2023-24 to improvise and strengthen the system.

#### Underground Cabling

EDG plans to enhance power infrastructure by converting overhead LT/HT networks to underground cabling in areas prone to monsoon-related breakdowns and dense vegetation. This cost-effective move aims to minimize power interruptions along coastal lines and in major towns, improving overall system reliability and boosting revenue returns.

#### LT Underground Cabling - Major works includes,

- Conversion of LT overhead lines to underground cabling in areas of Majorda section under Sub Div - III, Div - XVI Verna,
- Conversion of LT overhead network to underground cabling along the coastal belts of V.P. Betalbatim under the jurisdiction of S/D-I Benaulim, Division-XVI, Margao.

#### HT Underground Cabling - Major works includes,

- Conversion of 11KV Poirem overhead line to underground feeder in order to minimize the number and duration of Poriem feeder interruptions (Phase-III) in the jurisdiction of Section Office Poriem under Sub Division-II(R), Sankhali,
- Conversion of existing overhead 11KV network of 11KV Dramapur feeder fed from 33/11KV Cuncolim Sub-Station to 11KV underground cabling network in the jurisdiction of Cuncolim Municipal area under Sub Division-IV, Cuncolim.

EDG submits that it has considered the Capex & Capitalization for FY 2023-24 as per revised projections as submitted in formats along with the Petition. The Capital Investment, Capitalization, Capital Work in Progress (CWIP) and Gross Fixed Asset (GFA) for FY 2023-24 are discussed hereunder:



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Capital Investment and Capitalization during FY 2023-24:

EDG submits that the Gross Block considered in FY 2023-24 is based on provisional figure of FY 2022-23 and further addition based on the provisional values of Capital investment and Capitalisation for H1 of FY 2023-24. The EDG has deferred few projects tendered for FY 2023-24 to FY 2024-25.

EDG hereby submits a gist on the Capital Expenditure & Capitalization for FY 2023-24:

**Table 4-20: Capital Expenditure & Capitalisation for FY 2023-24 (Rs. Cr.)**

S/No	Name of scheme	FY 2023-24			
		Approved		Revised Estimates	
		CAPEX	CAPITALISATION	CAPEX	CAPITALISATION
Existing Schemes					
A1	Schedule Tribe Development Scheme (P)			39.22	79.16
A1(A)	Schedule Caste Development Scheme			2.99	2.99
A2	Infrastructure development through Electricity Duty (Plan)	39.01	39.01	479.60	320.07
A3	Erection and Augmentation of 33/11 KV S/S line (Plan)			4.90	3.92
A4	Normal Development Schemes (Plan)	6.00	6.00	6.00	95.00
A5	System Improvement Schemes (Plan)			8.73	20.45
A6	Construction of staff quarters and office buildings (Plan)			1.80	1.80
A7	Strengthening of 220 KV Transmission Network			23.69	23.69
A8	Erection of 220/110/33/11 KV Sub-Station at Verna (New)			0.41	-
A9	Restructured Accelerated Power Development and Reforms Programme Part A			0.52	-
A10	Underground Cabling			95.36	283.25
A11	R-APDRP Part B / IPDS			0.84	1.00
A12	EHV new Transmission / Sub-Station / Capacitor banks schemes			-	-
B1	Smart grid Development of existing network			-	-
B2	Sub-transmission and distribution improvement scheme			6.96	62.00
	Total	45.01	45.01	671.02	894.23
New Schemes					
Projects with Administrative approval		74.75	74.75	15.49	49.87



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S/No	Name of scheme	FY 2023-24			
		Approved		Revised Estimates	
		CAPEX	CAPITALISATION	CAPEX	CAPITALISATION
Projects Approved by EFC		96.84	96.84	72.77	166.29
Projects tendered (To start next year)		62.00	82.00	81.53	80.87
REVAMPED Distribution Projects					
1.	Smart Meter and AMI			-	-
2.	SCADA upgradation, cabling connection, infra development, modernization			145.00	145.00
3.	Training and Placement			-	-
	Total	450.00	425.00	145.00	145.00
Other Schemes					
1.	Saligao 3/63 MVA 220X33 kV S/s at Saligao & Associated D/C Lines			100.00	-
2.	Verna 220/110/33 kV			-	-
3.	Upgradation of PONDA EHV S/s project			15.02	5.15
4.	Tuem Project			13.55	11.50
5.	Over Head to Underground Cuncholim Conocona			-	-
6.	Xeldom S/s (220/33 63 MVA T/F)			-	-
	Total	-	-	128.57	16.65
Schemes Implemented / Proposed in 2023-24					
1.	Work of conversion of existing overhead Electrical network into underground cabling network at the vicinity of Shree Chandreshwar Bhutnath Devasthan at Parvat, Paroda Goa, under the jurisdiction of Elect. Sub Div-II, Quepem.”			1.40	1.40
2.	Tender-50(23-24) Work of laying of 11KV underground cable from 33/11KV Raia Substation to Curtorim Bazaar and from GIS Sub-station Navelim to Curotrim Bazaar for bifurcation of load with provisoin to ring feed supply during emergency on 11KV overhead Curtorim feeder in the jurisdiction of SD-IV, Curtorim Div IV ,Margoa Goa.			3.50	-



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S/No	Name of scheme	FY 2023-24			
		Approved		Revised Estimates	
		CAPEX	CAPITALISATION	CAPEX	CAPITALISATION
3.	Tender No.29(2023-24)/CSC - Work of conversion of existing overhead 11KV network of 11KV Chinchinim feeder fed from 33/11KV Cuncolim Sub-Station to 11KV underground cabling network in the jurisdiction of Cuncolim Municipal area under Sub Division-IV, Cuncolim			5.00	-
4.	Tender No.34(2023-24)/CSC - Work of conversion of existing overhead 11KV network of 11KV Malangini feeder fed from 33/11KV Cuncolim Sub-Station to 11KV underground cabling network in the jurisdiction of Cuncolim Municipal area under Sub Division-IV, Cuncolim			5.00	-
5.	Teender-3(23-24) Work of conversion of 11KV Overhead Bazar feeder to 11KV Underground network from 33/11KV Shiroda Substation under jurisdiction of sub div-II, Div X Ponda			1.00	-
6.	Tender No.16(2023-24)/CSC - Work of conversion of existing overhead 11KV network of 11KV Dramapur feeder fed from 33/11KV Cuncolim Sub-Station to 11KV underground cabling network in the jurisdiction of Cuncolim Municipal area under Sub Division-IV, Cuncolim			6.00	-
7.	Tender No.42(2023-24)/CSC - Work of conversion of existing overhead 11KV network of 11KV Cuncolim feeder fed from 33/11KV Cuncolim Sub-Station to 11KV underground cabling network in the jurisdiction of Cuncolim Municipal area under Sub Division-IV, Cuncolim			6.00	-
8.	Estimate for the work of conversion of LT OH line to UG cable along Swatantra Path in Vasco City area in the jurisdiction of S/D-I(U), Div-XI, Vasco.			9.40	9.40
9.	Estimate for the work of conversion of LT overhead networks into LT underground cable of Ambegal-I & II Patantali - I & II, Kashinath ground, Shivnagri Sahakari and IMA DTC (8 Nos DTC) for a total length of			6.50	-



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S/No	Name of scheme	FY 2023-24			
		Approved		Revised Estimates	
		CAPEX	CAPITALISATION	CAPEX	CAPITALISATION
	16Kms located in the jurisdiction of S/D - I,, Div- X, Ponda -I under Madkai Constituency.				
10.	Estimate for the work of conversion of LT overhead network into LT underground cable of Kapileshwari, Paunawada, Taulim, Durbhat Transformer Center in the jurisdiction of S/O - Kavale Sub Div I, Div - X Ponda under Madkai Constituency.			6.00	-
11.	Revised estimate for the work of conversion of 11KV OHL tapping sections of 11KV Saleli feeder to 11KV underground cable in the jurisdiction of Sub Division – III (O&M) Valpoi, Division – V Bicholim			5.90	5.90
12.	Revised estimate for the work of Supply, Erection, Testing and Commissioning of 11KV underground cable from Thana Junction to Surla Village DTC on Thana feeder			5.00	5.00
13.	Revised estimate for the work of conversion of LT overhead lines to underground cabling in areas of Majorda section under Sub Div - III, Div - XVI Verna			10.00	-
14.	Work of laying of 11KV 3CX300sq.mm XLPE cable to carry out the work of road widening at given locations 1) Odxel junction to Odxel DTC, 2) Oitiyant DTC to Emgee Green DTC 3) 33/11KV Nagali Hills S/S to Taleiago church			0.22	1.72
15.	Work of providing ring system for 11KV network at Chorao befalling under the jurisdiction of SD-I(R), Corlim by laying 11KV 3Core 185sq.mm XLPE underground cable under system improvement scheme			1.77	1.77
16.	Work of conversion of 33KV Panaji I & Panaji II overhead lines to underground cabling from 33/11 KV EDC substation at EDC complex to 33/11 KV Altinho GIS Substation yard at Altinho Panaji			3.96	3.96
17.	Tender No. 19/22-23: Work of realignment of 2nos DTcs along with the associated HT & LT lines on the LHS & RHS of NH-66 near			1.06	1.06



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S/No	Name of scheme	FY 2023-24			
		Approved		Revised Estimates	
		CAPEX	CAPITALISATION	CAPEX	CAPITALISATION
	Gomeco and CPWD Holiday homes at bambolim to tacke smooth running of traffic during G-20 meetings as per the request received from PWD authorities & Hon'ble PWD Minister.				
18.	Tender No. 21/22-23: Work of repair of street lights from Merces junction to old goa along National highway in view of G20 summit.			2.57	2.57
19.	Tender No. 20/22-23: work of providing additional temporary illumination for Old Secretariat building, Panaji; Collectorate Building; ESG complex; Immaculate Conception Church; St. Thomas chapel, Fontainhas; Museum of Chritian Arts, Old Goa; Shri, Mahalaxmi temple, Panaji; Fontainhas and Sao Tome, Mala; Accounts building, Panaji on the occassion of G20 summit.			1.86	1.86
20.	Work of Renovation and improvement of LT overhead network along the coastal belts of Vilage Panchayat Cana-Benaulim under the jurisdiction of Sub-Division-I, Benaulim, Undert Division-XVI, Margao			6.02	-
21.	Work order for Tender for the work of conversion of overhead old 11KV line to 11 KV Insulated conductor of Bhironda feeder from Valpoi Sub Station to Padeli and Velguem Village in the jurisdiction of Sub Division-III, Valpoi			6.00	-
22.	Work order for Tender for the work of conversion of overhead old 11KV line to 11 KV Insulated conductor of Thana feeder from Valpoi Sub Station to Thana junction in the jurisdiction of Sub Division-III, Valpoi			6.40	-
23.	Tender -15(23-24) work of conversion of 11KV overhead Bondla feeder to 11KV Underground network from usgao circle to Bondla , in Valpai constituency under the jurisdiction of sub Div Div x , curti ponda Goa			5.00	-



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S/No	Name of scheme	FY 2023-24			
		Approved		Revised Estimates	
		CAPEX	CAPITALISATION	CAPEX	CAPITALISATION
24.	Tender No. 09(2023-24)/ CSC: Work of coneverting of 11KV Single Circuit Neura feeder into underground network by laying 11KV 3Core 300sq.mm Al. armoured XLPE cable for a distance of 10.5Km under S/d III(R), Bambolim, Division I Panaji.			3.98	-
25.	Work of Laying Testing and Commissioning of 11KV underground cable interlink line from Kudshe Tisk to Dhawe Tisk of 11KV Nagargao feeder in the jurisdiction of s/d III, Valpao Div V Bicholim			1.71	1.71
26.	Work of conversion of 11KV Porem overhead line to underground feeder in order to minimize the number and duration of Porem feeder interruptions (Phase-III) in the jurisdiction of Section Office Porem under Sub Division-II(R), Sankhali.			3.10	-
27.	Expenditure Sanction for the "Work of Supply, Erection, Testing and Commissioning of 11KV underground cable from 33/11KV Pale Sub-Station to Kankirem Verekar Crusher in the jurisdiction of Sub Division-III, Valpoi".			4.90	-
28.	Expenditure Sanction for Tender No. 31(2023-24)/CSC: Work of conversion of existing overhad LT network to LT underground system of 07 nos. of DTC under Section Office Britona and Porvorim, Sub Division-II, Porvorim, Division-VI, Mapusa.			4.50	-
29.	Tender No. 33(2023-24)/CSC: Work of conversion of existing overhead LT network to LT underground system for 04nos. of DTC under Section Office Porvorim, Sub Division-II, Porvorim, Division-VI, Mapusa.			3.00	-
30.	Work of conversion of existing overhead LT network to LT underground system of 4Nos. of DTC namely Nana Nani Park, Nirvana Nest, Sulabh International, Police Station under Section Office Britona and			4.00	-



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S/No	Name of scheme	FY 2023-24			
		Approved		Revised Estimates	
		CAPEX	CAPITALISATION	CAPEX	CAPITALISATION
	Porvorim, Sub-Division-II, Porvorim, Division-VI, Mapusa.				
31.	Tender No. 58(2023-24)/CSC: Work for conversion of 33KV Double Circuit overhead line to underground netowrk from Bambolim Sub-Station to Nagali Sub-Station with interlink to existing Super Speciality Hospital cable within the jurisdiction of Sub Division-III(R), Bambolim, Division-I, Panaji.			4.20	-
32.	Tender No. 59(2023-24)/CSC: Work of conversion of 11KV overhead network of Industry feeder to 11KV underground along road from 33/11KV Bethora Sub-Station under jurisdiction of Sub Division-II, Division-X, Ponda.			4.10	-
33.	Estimate for the work of conversion of 11KV overhead network Nirankal feeder to 11KV underground system along Nirankal, Saterimol, Mainewada, Codar in Shiroda Constituency under Section Office Bethora, Sub Division-II, Division-X, Ponda.			6.50	-
	<b>Total</b>	-	-	<b>145.55</b>	<b>36.35</b>
<b>Deposit Works</b>					
	<b>Deposit Works</b>	-	-	-	-
<b>Grand Total</b>		<b>728.59</b>	<b>723.59</b>	<b>1,259.94</b>	<b>1,389.26</b>

As seen from the above table, the total Capital Expenditure and Capitalization estimated for FY 2023-24 as per estimates is Rs. 1,259.94 Cr. and Rs. 1,389.26 Cr., respectively without deposit works. The details of capital expenditure schemes for FY 2023-24 is provided in the Format (Capex & Capitalisation FY 2023-24) of Tariff Filing Formats.

The details of opening Capital Works-in-Progress, investments during the year and investments capitalised for the year are summarized in the table below:

**Table 4-21: CWIP for FY 2023-24 (Rs. Cr.)**

Particulars	Revised Projections FY 2023-24
<b>Opening Balance</b>	<b>1,533.68</b>
Add: New Investments	1,256.95





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Particulars	Revised Projections FY 2023-24
Total	2,790.63
Less: Investment Capitalized	597.10
Adjustments	(194.78)
<b>Closing Balance</b>	<b>1,998.75</b>

EDG submits that the opening and closing balance of GFA for FY 2023-24 onwards has been arrived at after considering the actual capitalization for the FY 2022-23 and estimated capitalization for FY 2023-24. The computation of the same is provided in the table given below:

**Table 4-22: Opening & Closing GFA for FY 2023-24**

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Opening GFA	1,398.63	1,443.85	1,566.39	1,784.89
Addition	50.86	165.19	228.15	1,389.09
Retirement	5.63	3.17	9.65	-
Closing GFA	1,443.85	1,566.39	1,784.89	3,173.98

EDG also submits that Opening and Closing GFA for FY 2023-24 after excluding the assets created from Electricity Duty and Grants in the following table:

**Table 4-23: Opening & Closing GFA (excl. ED and Grant) for FY 2023-24**

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Opening GFA (Excl. Grant & ED)	1,107.15	1,136.00	1,208.12	1,316.75
GFA Addition during the year	51.90	165.19	228.32	1,389.26
Less: 60% and 75% Grant Component of APDRP Part-B / IPDS Scheme	2.74	30.45	6.25	-
Less: Revamped Scheme (15% Grant Prepaid Meter; 100% for DBM, billing modules etc; 60% for SCADA)	-	-	-	145.00
Less: Schemes out of ED Fund	14.68	59.45	79.24	528.24
Less: Deposit Works			24.56	-
Net GFA addition during the year	34.48	75.28	118.28	716.02
Less: Retirement	5.63	3.17	9.65	-
<b>Opening Net GFA (Excl. Grant &amp; ED)</b>	<b>1,136.00</b>	<b>1,208.12</b>	<b>1,316.75</b>	<b>2,032.77</b>



Regulation 31.4 of MYT Regulations, 2021 specifies that,

*“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.”*

Accordingly, the opening and closing balance of GFA from FY 2023-24 onwards has been arrived at after reduction of accumulated depreciation as on 1<sup>st</sup> April 2023 and accordingly, the details of the Net Fixed Assets for FY 2023-24 are provided in the table below:

**Table 4-24: Opening & Closing GFA (Net of Accumulated Depreciation) for FY 2023-24**

Particulars	FY 2022-23	FY 2023-24
<b>Opening GFA net of Accumulated Depreciation</b>	1,192.04	1,325.23
<b>Addition</b>	142.84	716.02
<b>Retirement</b>	9.65	-
<b>Closing GFA</b>	<b>1,325.23</b>	<b>2,041.25</b>

#### Depreciation for FY 2023-24

Regulation 31.7 of the MYT Regulations, 2021 provides for depreciation to be calculated as specified below:

*“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.”*

Regulation 31.1 of the JERC MYT Regulations, 2021 provides for depreciation to be calculated as specified below:

*“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.”*

As per the above said Regulation, the depreciation shall not be allowed on assets funded through capital subsidies, consumer contribution or grants. Accordingly, opening GFA excluding grant and electricity duty works out to Rs. 1,325.23 Cr. Hence, depreciation towards GFA excluding grant & electricity duty works out as Rs. 72.95 Cr. in proportion with GFA excluding grant and electricity duty to total average GFA. The table below shows the working of Depreciation considered in ARR for FY 2023-24:



**Table 4-25: Depreciation for FY 2023-24 (Rs. Cr.)**

Particulars	Revised Projections FY 2023-24
Opening Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)	1325.23
<i>Add: Gross Asset Addition</i>	<i>1389.26</i>
<i>Less: Contribution from Subsidies/ Grants/ Beneficiaries' Contribution / Consumers Contribution</i>	<i>673.24</i>
<i>Value of Asset eligible for depreciation</i>	<i>716.02</i>
Add: Addition During the Year	716.02
Less: Decapitalisation	
<b>Closing Gross Fixed Assets</b> (excluding Grants/ consumers Contribution etc.)	<b>2041.25</b>
Average Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)	1683.24
<b>Depreciation</b>	<b>73.05</b>
<b>Weighted Average Rate of Depreciation</b>	<b>4.34%</b>

The details of GFA & Depreciation for FY 2023-24 are provided in the Format 15 of Tariff Filing Formats. The Hon'ble Commission is requested to approve the depreciation for FY 2023-24 as estimated above.

### Interest & Finance Charge

EDG submits that the Regulations 29.1 & 29.2 of the MYT Regulations, 2021 specifies that:

*"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.*

*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."*

EDG submits that as per Regulation 27.2 of JERC MYT Regulations, 2021, if the actual equity 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. Extract of the relevant Regulation is reproduced as under:

*"27 Debt to Equity Ratio*

.....



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 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"*

EDG submits that most capital assets are created out of the equity contribution from Government of Goa and the actual borrowing of loan is only to the extent of the APDRP schemes. EDG has computed loan balance and interest on loan as per normative principles and methodology adopted by the Hon'ble Commission in past Orders.

The closing balance of normative loan considered in the True-up for FY 2022-23 has been considered as the opening normative loan for FY 2023-24. Further during FY 2023-24, addition of net GFA (excluding grant and electricity duty) is considered. Normative loan repayments are considered same as depreciation amount excluding the estimated proportion of grant and electricity duty for FY 2023-23. The rate of Interest for long term Interest rate has been considered at the rate of 8.50% including 100 basis points as per one-year SBI MCLR Interest rate applicable as on 1<sup>st</sup> April April 2023 which works out to be 9.50%. It is requested to Hon'ble Commission to approve Interest on Loan on normative principles.

**Table 4-26: Interest & Finance Charges for FY 2023-24 (Rs. Cr.)**

Particulars	Approved in T.O dated 30th March, 2023	Revised Projections FY 2023-24
Opening Normative Loan	281.11	254.28
Add: Normative Loan during the year/GFA during the year	175.17	501.21
Less: Normative Repayment for the year	59.36	73.05
<b>Closing Normative Loan</b>	<b>396.92</b>	<b>682.45</b>
Average Normative Loan	339.01	468.36
Rate of Interest	8.00%	9.50%
<b>Interest on Normative Loan</b>	<b>27.12</b>	<b>44.49</b>

The Hon'ble Commission is requested to approve the Interest & Finance Charges for FY 2023-24 as shown in the above table. The details of Interest & Finance charges are provided in Format 12 of the Tariff Filing Formats.

### Interest on Working Capital

As per Regulation 63.1 of the MYT Regulations, 2021, Interest on Working Capital for retail supply activity of the Licensee shall consist of:

O&M Expenses for one (1) month;

Maintenance spares at 40% of repair and maintenance for one month;



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Receivables equivalent to two (2) months of the expected revenue from consumers at prevailing tariff;

Less: Consumer security deposit but excluding bank guarantee/ fixed deposit receipt.

Regulation 32.4 of the JERC MYT Regulations, 2021 specifies as below:

*“32.4 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”*

The Interest Rate is considered equivalent to the SBI Base MCLR available as on 01<sup>st</sup> April 2023 for FY 2022-23, which is at 8.50%, plus 200 basis points, which works out to be 10.50%.

In line with the aforesaid Regulation, the detailed computation of Interest on Working Capital for FY 2023-24 is provided in the table below:

**Table 4-27: Interest on Working Capital for FY 2023-24 for Wire Business (Rs. Cr.)**

For Wheeling Business		
S/No	Particulars	APR
		FY 2023-24
A.	O&M Expenses for Wire Business	
i)	R&M Expenses	56.05
ii)	A&G Expenses	21.15
iii)	Employee Cost	169.00
iv)	Total O&M Expenses	246.19
v)	O&M Expenses for wire business for 1 month	20.52
B.	Maintenance Spares (@ 40% of R&M Expenses)	1.87
C.	Receivables equivalent to two (2) month of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs.	56.01
D.	Less: Amount, if any, held as security deposits from Distribution System Users	20.77
E.	Total Working Capital (A (v)+B+C-D)	57.62
F.	Rate of Interest	10.50%
G.	Interest on Working Capital (Wheeling Business)	6.05



**Table 4-28: Interest on Working Capital for FY 2023-24 for Supply Business (Rs. Cr.)**

For Retail Supply Business		
S/No	Particulars	APR
		FY 2023-24
A.	O&M Expenses for Retail Supply Business	
i)	R&M Expenses	6.23
ii)	A&G Expenses	21.15
iii)	Employee Cost	253.50
iv)	Total O&M Expenses	280.87
v)	O&M Expenses for retail supply business for 1 month	23.41
B.	Maintenance Spares (@40% of R&M Expenses for Retail Supply Business)	0.21
C.	Receivables equivalent to 2 months of average of total revenue from sale of energy, approved by Commission in the ARR	391.27
D.	Less: Consumer Security Deposit	186.92
E.	Less: One month of power procurement cost	194.81
F.	Total Working Capital (A (v) + B + C - D -E)	33.16
G.	Rate of Interest	10.50%
H.	<b>Interest on Working Capital (Retail Supply Business)</b>	<b>3.48</b>

The Hon'ble Commission is requested to approve the Interest on Working Capital as presented in the tables above. The details of Interest on Working Capital for FY 2023-24 are provided in Format 14 of the Tariff Filing Formats.

### Interest on Consumer Security Deposit

As per the Regulation 5.135 of Electricity Supply Code Regulations, 2018 and subsequent amendment dated 25<sup>th</sup> March 2019:

*“The Licensee shall pay interest to the consumer at the Bank Rate declared by the Reserve Bank of India prevailing on the 1st of April for the year, payable annually on the consumer's security deposit with effect from date of such deposit in case of new connections energized after the date of this notification, or in other cases, from the date of notification of this Supply Code, 2018. The interest accrued during the year shall be adjusted in the consumer's bill for the first billing cycle of the ensuing financial year. If the Security Deposit is submitted in the form of Bank Guarantee or by providing lien against fixed deposits, no interest shall be payable to the consumer.”*

Regulation 28.11 of the MYT Regulations, 2021 specifies as follows:



*“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 provision of interest on security deposits is to be made at the RBI Bank Rate. The interest rate considered is 6.75%, which is RBI Bank rate as on 1<sup>st</sup> April 2023.

In view of the above, Interest on Security Deposit is calculated at Rs. 14.02 Cr. for FY 2023-24 on cash security deposit amounts excluding Bank Guarantee and Fixed Deposit Receipts based on the above Regulation.

The table below shows details of Interest on Security Deposit for FY 2023-24:

**Table 4-29: Interest on Security Deposit for FY 2023-24 (Rs. Cr.)**

Particulars	Approved in T.O dated 30th March, 2023	Revised Projections FY 2023-24
Opening Security Deposit	112.57	189.65
Net Additions during the year	27.55	36.88
<i>Less: Deposits Refunded</i>	<i>0.00</i>	<i>0.80</i>
Closing Security Deposit	<b>140.12</b>	<b>225.73</b>
Average Security Deposit	126.35	207.69
Rate of Interest (%)	4.25%	6.75%
<b>Interest on Security Deposit</b>	<b>5.37</b>	<b>14.02</b>
<b>Cumulative Interest on Security Deposit including Past Years</b>	-	<b>136.00</b>
<b>Interest on Security Deposit Paid</b>	-	<b>0.94</b>
<b>Balance Interest on Security Deposit to be Paid during Control Period</b>	-	<b>135.06</b>

The Hon’ble Commission is requested to approve the Interest on Security Deposit for FY 2023-24 as detailed in the above table.

## Return on Equity

Regulations 28.2 and 28.3 of the MYT Regulations, 2021 specifies that:

*“28.2 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.*

*28.3 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.”*



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In line with the above Regulations and the methodology proposed in the MYT Regulations, 2021, EDG has calculated the Return on Equity as outlined in the following table for FY 2023-24.

The opening balance of assets and accumulated depreciation are considered as per provisional annual accounts of FY 2022-23 to arrive at the opening balance for FY 2023-24.

Further, normative equity addition during the year is considered at 30% of the net GFA addition excluding proportion of grant and electricity duty.

The table below shows calculation of Return on equity for FY 2023-24:

**Table 4-30: Return on Equity for FY 2023-24 (Rs. Cr.)**

S/No	Particulars	FY 2023-24	
		Approved in T.O dated 30th March, 2023	Revised Projections FY 2023-24
1.	Opening Balance of Equity	421.69	377.82
2.	Net Additions during the Year	75.07	214.81
3.	Closing Balance of Equity	496.76	592.62
4.	Average Equity	459.22	485.22
5.	Average Equity (Wires Business)	413.30	436.70
6.	Average Equity (Retail Supply Business)	45.92	48.52
7.	Rate of Return on Equity for Wire Business %	15.50%	15.50%
8.	RoE Wire Business	64.06	67.69
9.	Rate of Return on Equity for Retail Supply Business %	16.00%	16.00%
10.	RoE on Retail Supply business	7.35	7.76
11.	<b>RoE (Wire and Retail Supply business)</b>	<b>71.41</b>	<b>75.45</b>

The Hon'ble Commission is requested to approve the Return on equity for FY 2023-24 as shown in the table above. The details of Return on Equity for FY 2023-24 are provided in Format 16 of the Tariff Filing Formats.

### **Non-Tariff Income**

Non-Tariff Income comprises proceeds from sale of dead stock, wastepaper, receipt from State Electrical Inspectorate and other miscellaneous receipts.

Actual rebates received for early/prompt payment of the bills from the generators are considered as incentive and the same is considered in the Non-Tariff Income in H1. Since the actual values are to be considered, the rebates from power purchase of H2 cannot be projected for FY 2023-24.

The Non-Tariff Income for FY 2023-24 is estimated to be Rs. 52.06 Cr.





**Table 4-31: Non-Tariff Income for FY 2023-24 (Rs. Cr.)**

S/No	Particulars	Approved in T.O dated 30th March, 2023	Provisional for FY 2023-24
1.	Meter/metering equipment/service line rentals	-	-
2.	Service Charges	-	-
3.	Customer Charges	-	-
4.	Revenue from Late Payment Surcharge	-	-
5.	Miscellaneous Charges	-	-
6.	Rebates from Generators	20.28	28.36
7.	Miscellaneous Receipts	29.39	23.70
8.	Interest on advances to suppliers/contractors	-	-
9.	Interest on Staff Loans and Advances	-	-
10.	Income from Trading	-	-
11.	Income from Staff Welfare Activities	-	-
12.	Excess found on Physical Verification	-	-
13.	Interest on Investments, Fixed and Call Deposits and Bank Balances	-	-
14.	Prior Period Income	-	-
15.	Income from Open Access Charges (Application fee, Cross Subsidy Surcharge, Additional Surcharge, Transmission and/or Wheeling Charges, Scheduling Charges etc.	-	-
16.	Sale Proceeds of dead stock, waste paper etc.	-	-
17.	Any other Income not included above	-	-
	<b>Total</b>	<b>50.21</b>	<b>52.06</b>

The details of Non-Tariff Income for FY 2023-24 are provided in Format 21 of the Tariff Filing Formats.

### Aggregate Revenue Requirement for FY 2023-24

Based on the submissions made in the foregoing paragraphs, the net Aggregate Revenue Requirement for FY 2023-24 is shown in the table below:

**Table 4-32: Aggregate Revenue Requirement for FY 2023-24 (APR) (Rs. Cr.)**

S/No	Particulars	Approved in T.O dated 30th March, 2023	Estimated FY 2023-24
A	Receipts		



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S/No	Particulars	Approved in T.O dated 30th March, 2023	Estimated
			FY 2023-24
1.	Revenue from Sale of Power	2,027.60	2,795.08
<b>B</b>	<b>Expenditure</b>		
1.	Cost of Power Purchase from own Generating Stations	-	-
2.	Cost of Power Purchase from other Generating Stations	1,723.90	2,032.24
3.	Inter State Transmission Charges	303.70	305.48
4.	Intra State Transmission Charges	-	-
5.	SLDC Fees & Charges	-	-
6.	O&M Expenses (Gross)	529.79	527.06
	a) R&M Expenses	48.93	62.27
	b) Employee Cost	447.24	422.49
	c) A&G Expenses	33.61	42.30
7.	Depreciation	59.36	73.05
8.	Interest and Finance Charges	27.12	44.49
9.	Interest on Working Capital	12.09	9.53
10.	Prior Period Expenses	-	-
11.	Interest on Consumer Security Deposit	5.37	14.02
12.	<b>Extraordinary Items</b>	-	-
13.	Bad and Doubtful Debts	-	-
14.	<b>Other Debts and Write-offs</b>	-	-
15.	<b>Statutory Levies and Taxes, if any</b>	-	-
16.	Less: Expenses Capitalised	-	-
	a) Interest Charges Capitalized	-	-
	b) R&M Expenses Capitalized	-	-
	c) A&G Expenses Capitalized	-	-
	d) Employee Cost Capitalized	-	-
	<b>Sub Total (a+b+c+d)</b>	-	-
	<b>Sub Total Expenditure (1 to 15-16)</b>	2,661.32	3,005.88
<b>C</b>	Return on Equity	71.41	75.45
<b>D</b>	Less: Non-Tariff and other Income	50.21	52.06
<b>E</b>	Less: Any Grant/ Subventions, other subsidy provided by the Government	-	-
<b>F</b>	<b>Annual Revenue Requirement (B+C-D-E)</b>	<b>2,682.53</b>	<b>3,029.27</b>

The Hon'ble Commission is requested to approve the net Aggregate Revenue Requirement for FY 2023-24 as described in the above table.

### Revenue from Retail Sale of Power

EDG has billed the consumers based on the tariff approved for FY 2023-24. The revenue for H1 (April to September) is Rs. 1,190.56 Cr. against sale of 2,374.11 MU. The overall revenue from



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sale of power for FY 2023-24 is estimated at Rs. 2,795.08 Cr. for sale of 4,661.14 MU and the Hon'ble Commission is requested to approve the same. The category-wise computation of revenue is presented in the table given below:

**Table 4-33: Revenue from Sale of Power for FY 2023-24**

S/No	Category	Approved Revenue for FY 2023-24 from Retail Tariff determined by Commission (In INR Cr) FY 2023-24					Actual Revenue for FY 2023-24 from the existing retail tariff determined by Commission (in INR Cr) FY 2023-24		
		Full year revenue (Rs. Crore)				Average Billing Rate (Rs/kWh)	Full year revenue (Rs. Crore)		Average Billing Rate (Rs/kWh)
		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total		Sales in MU	Total	
<b>1.</b>	<b>Domestic</b>	<b>1,469.35</b>	<b>46.46</b>	<b>383.20</b>	<b>429.66</b>	2.92	<b>1,370.61</b>	<b>459.93</b>	<b>3.36</b>
(i)	LT-D Domestic	1,468.06	46.41	383.02	429.43	2.93	1,369.28	459.56	3.36
	0-100 units	564.39	14.17	90.30	104.47	1.85	519.41	48.98	0.94
	101-200 units	358.16	10.22	84.17	94.39	2.64	331.72	45.11	1.36
	201-300 units	196.18	8.02	57.87	65.89	3.36	183.40	31.69	1.73
	301-400 units	108.71	4.80	42.40	47.19	4.34	102.94	22.91	2.23
	Above 400 units	240.62	9.21	108.28	117.49	4.88	231.81	57.85	2.50
(ii)	Low Income Group	0.93	0.00	-	0.00	0.00	0.93	0.13	1.40
(iii)	HT-D Domestic	0.37	0.05	0.18	0.22	5.95	0.40	0.24	6.00
<b>2.</b>	<b>Commercial</b>	<b>629.00</b>	<b>50.40</b>	<b>311.43</b>	<b>361.83</b>	<b>5.75</b>	<b>713.77</b>	<b>422.99</b>	<b>5.93</b>
(i)	LT-C Commercial	474.02	24.36	227.11	251.47	5.31	520.18	286.81	5.51
	0-100 units	85.68	6.79	30.43	37.21	4.34	83.40	38.70	4.64
	101-200 units	51.35	2.15	22.35	24.50	4.77	53.03	26.40	4.98
	201-400 units	63.74	2.75	30.93	33.68	5.28	68.30	37.93	5.55
	Above 400 units	273.06	12.67	143.41	156.09	5.72	315.46	183.78	5.83
(ii)	HT-C Commercial	154.98	26.04	84.31	110.35	7.12	193.59	136.18	7.03
<b>3.</b>	<b>Industrial</b>	<b>2,341.91</b>	<b>193.15</b>	<b>1,140.27</b>	<b>1,333.42</b>	<b>5.69</b>	<b>2,402.99</b>	<b>1,431.65</b>	<b>5.96</b>
(i)	LT-I Industrial	86.77	5.65	33.35	39.00	4.49	88.85	45.55	5.13
	0-500 units	16.91	2.61	5.75	8.36	4.94	16.07	9.89	6.15
	Above 500 units	69.86	3.04	27.59	30.64	4.39	72.77	35.66	4.90
(ii)	Low Tension-Mixed/LT-P (Hotel Industries)	3.90	0.14	2.05	2.19	5.62	3.09	1.91	6.18
(iii)	High Tension-I/HT-I	1,756.68	156.34	866.31	1,022.64	5.82	1,767.11	1,062.19	6.01
	Connected at 11/33 kV	1,467.02	133.76	729.52	863.28	5.88	1,458.30	886.46	6.08
	Connected at 110 kV	289.66	22.58	136.78	159.36	5.50	308.81	175.73	5.69



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S/No	Category	Approved Revenue for FY 2023-24 from Retail Tariff determined by Commission (In INR Cr) FY 2023-24					Actual Revenue for FY 2023-24 from the existing retail tariff determined by Commission (in INR Cr) FY 2023-24		
		Full year revenue (Rs. Crore)				Average Billing Rate (Rs/kWh)	Full year revenue (Rs. Crore)		Average Billing Rate (Rs/kWh)
		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total		Sales in MU	Total	
(iv)	High Tension-Ferro/SM/PI/SR	494.55	31.03	238.57	269.60	5.45	543.94	322.00	5.92
<b>4.</b>	<b>Agriculture</b>	<b>35.47</b>	<b>1.35</b>	<b>6.64</b>	<b>7.99</b>	<b>2.25</b>	<b>42.72</b>	<b>10.30</b>	<b>2.41</b>
(i)	Low Tension-AG/LT-AGP (Pump Sets/Irrigation)	14.22	0.81	2.13	2.94	2.07	18.93	4.86	2.57
(ii)	Low Tension-AG/LT-AGA (Allied Activities)	0.65	0.04	0.11	0.15	2.31	1.54	0.34	2.21
(iii)	High Tension-AG/HT-AGP (Pump Sets/Irrigation)	6.48	0.39	1.62	2.01	3.10	6.14	1.60	2.61
(iv)	High Tension-AG/HT-AG (Allied Activities)	14.12	0.11	2.77	2.88	2.04	16.12	3.50	2.17
<b>5.</b>	<b>Military Engineering Services/ Defense Establishments</b>	<b>33.55</b>	<b>1.65</b>	<b>16.78</b>	<b>18.43</b>	<b>5.49</b>	<b>35.74</b>	<b>16.10</b>	<b>4.50</b>
<b>6.</b>	<b>Public Lighting</b>	<b>46.27</b>	<b>0.92</b>	<b>26.14</b>	<b>27.06</b>	<b>5.85</b>	<b>50.13</b>	<b>13.87</b>	<b>2.77</b>
<b>7.</b>	<b>Hoardings/ Signboards</b>	<b>0.27</b>	<b>0.04</b>	<b>0.27</b>	<b>0.30</b>	<b>11.11</b>	<b>0.14</b>	<b>0.21</b>	<b>15.00</b>
<b>8.</b>	<b>Temporary</b>	<b>8.80</b>	<b>0.00</b>	<b>7.70</b>	<b>7.70</b>	<b>8.75</b>	<b>32.44</b>	<b>24.19</b>	<b>7.46</b>
(i)	LT	3.60	0.00	3.01	3.01	8.36	27.51	18.76	6.82
	LT Domestic	0.25	0.00	0.11	0.11	4.40	3.28	1.42	4.33
	LT Commercial	3.35	0.00	2.90	2.90	8.66	24.23	17.34	7.16
(ii)	HT	5.20	0.00	4.69	4.69	9.02	4.93	5.43	11.01
<b>9.</b>	<b>Single Point Supply</b>	<b>5.38</b>	<b>0.56</b>	<b>2.67</b>	<b>3.23</b>	<b>6.00</b>	<b>6.97</b>	<b>4.38</b>	<b>6.28</b>
(i)	Residential Complexes	0.00	0.00	0.00	0.00	-	0.00	0.00	-



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S/No	Category	Approved Revenue for FY 2023-24 from Retail Tariff determined by Commission (In INR Cr) FY 2023-24					Actual Revenue for FY 2023-24 from the existing retail tariff determined by Commission (in INR Cr) FY 2023-24		
		Full year revenue (Rs. Crore)				Average Billing Rate (Rs/kWh)	Full year revenue (Rs. Crore)		Average Billing Rate (Rs/kWh)
		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total		Sales in MU	Total	
(ii)	Commercial Complexes	5.38	0.56	2.67	3.23	6.00	6.97	4.38	6.28
(iii)	Industrial Complexes	0.00	0.00	0.00	0.00	-	0.00	0.00	-
10.	Other Categories	-	-	-	-	-	5.63	2.33	4.14
(i)	EV Charging Stations	-	-	-	-	-	5.63	2.33	4.14
	<b>TOTAL</b>	<b>4,570.01</b>	<b>294.53</b>	<b>1,895.08</b>	<b>2,189.60</b>	<b>4.79</b>	<b>4,661.14</b>	<b>2,385.94</b>	<b>5.12</b>

Actual Revenue of FPPCA for H1 is Rs. 174.90 Cr. and the estimated amount of Rs. 143.27 Cr. for Q3 which is approved by Hon'ble JERC @ Rs. 1.23 /Unit and estimated amount of Rs. 90.96 Cr. for Q4 is considered for FY 2023-24, which works out to Rs. 409.14 Cr. So, the revenue from Fixed Charge (FC) and Energy Charge (EC) or Variable Charge (VC) for FY 2023-24 (H1 + H2) of Rs. 2385.94 Cr. plus Rs. 409.14 Cr. of revenue from FPPCA amounting to Rs. 2,795.08 Cr. is considered for computation of the Revenue Gap, as detailed below.

#### Estimated Revenue Gap for FY 2023-24

EDG submits that it has estimated the Net Revenue Gap for FY 2023-24 after considering the budgetary support from the Government of Goa and the same is presented in the table given below.

**Table 4-34: Revenue Gap for FY 2023-24 (APR) (Rs. Cr.)**

Particulars	Approved in T.O dated 30th March, 2023	Revised Projections FY 2023-24
Net Revenue Requirement	2,682.53	3,029.27
Revenue from Sale of Power	2,189.60	2,795.08
Revenue Gap during the Year	492.93	234.20
Less: Budgetary Support for State Govt.	492.93	234.20
Net Revenue to be carried forward	-	-

Government of Goa has agreed to provide the budgetary support for any Revenue Gap for FY 2023-24. Accordingly, the final Revenue Gap approved by the Hon'ble Commission for FY 2023-



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24 will be provided by Government of Goa as budgetary support. Thus, the Revenue Gap carried forward to FY 2024-25 has been considered as NIL.

In view of above, the Hon'ble Commission is requested to allow Revenue Gap for FY 2023-24 as NIL as computed in the above table for the purpose of carrying forward to FY 2024-25.



## AGGREGATE REVENUE REQUIREMENT FOR FY 2024-25

### Preamble

The MYT Regulations, 2021 clearly specifies that the Hon'ble Commission shall determine the tariff under MYT framework with effect from 1st April 2021. The relevant section is quoted below:

*"12 Annual Performance Review, Truing-up and tariff determination during the Control Period*

*...*

*12.3 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 financial and actual operational 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 estimates of 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;*
- c) Tariff determination for the ensuing Year of the Control Period based on the revised forecast of the Aggregate Revenue Requirement for the Year;*
- d) Review of compliance with directives issued by the Commission from time to time;*
- e) Other relevant details, if any."*

EDG accordingly submits the proposed Aggregate Revenue Requirement for FY 2024-25 along with the proposed Tariff for FY 2024-25 (based on the parameters defined in the MYT Regulations, 2021) against the approved Business Plan Order for MYT Control Period from FY 2022-23 to FY 2024-25 dated 31<sup>st</sup> March, 2022 issued by the Hon'ble Commission.

### Principles for determination of ARR

This chapter summarizes the Aggregate Revenue Requirement (ARR) for FY 2024-25. The projections have been made based on the parameters specified in the MYT Regulations, norms proposed and approved in Business Plan and Tariff Order and also based on actual data for previous years.

The overall performance parameters proposed for FY 2024-25 are based on the methodologies discussed in subsequent paragraphs.

### Billing Determinants for FY 2024-25

EDG has submitted number of category-wise Consumers, Connected Load and Sales projected based on the various CAGRs and assumptions. The same has been considered to project the



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revenue for FY 2024-25 as per the format provided by Hon'ble Commission.

**Energy Sales:**

EDG submits that the Hon'ble Commission had approved the sales for FY 2024-25 as 5,021.76 MU. The actual sales for FY 2022-23 was 4,438.06 MU and the actual sales during first half of FY 2023-24 was 2,374.11 MU. EDG has considered the actual sales during FY 2022-23 and first half of FY 2023-24 for projecting the category-wise sales for FY 2024-25.

For the purpose of ARR for FY 2024-25, EDG has extrapolated the figures of sales determined for APR of FY 2023-24 with 2,3,4, & 5-year CAGR along with certain assumptions and in case of (-) negative CAGR, assumption of 3% is considered.

Further, EDG submits that the Govt. of Goa has signed a MOU with Indian Oil Corporation Limited (IOCL) for setting up of EV Charging Stations at their Retail Outlets throughout Goa state. As per their request, EDG will provide 41 new electrical connections to IOCL. Hence, these new connections have been considered by EDG in the projection of the sales for FY 2024-25 under 'EV Charging Stations'. The request letter dated 08-11-2023 by IOCL is attached in **Annexure-6** of this petition.

The following table shows the category-wise Sales considered by EDG for FY 2024-25 vis-à-vis Sales approved in the JERC MYT Business Plan Order dated 31<sup>st</sup> March, 2022.

**Table 0-1: Sales for FY 2024-25 (MUs)**

S/No	Category of Consumer	Approved in MYT Order dated 31 <sup>st</sup> March, 2022	Projections for FY 2024-25
<b>A. LOW TENSION SUPPLY</b>			
1.	LTD/Domestic	1,521.28	1,454.18
2.	LT-LIG (Low Income Group)	1.37	0.99
3.	LTC/Commercial	498.09	545.61
4.	LTI/ Industrial	80.91	96.23
5.	LT Mixed/ LT-P Hotel Industries	4.48	3.24
6.	LTAG/LT-AGP (Pump Sets/Irrigation)	18.08	19.37
7.	LTAG/LT-AGA (Allied Activities)		1.57
8.	LTPL Public lighting	29.61	55.14
9.	LT Hoarding /Signboard	0.16	0.16
<b>B. HIGH TENSION SUPPLY</b>			
10.	HTD Domestic	0.38	0.41
11.	HTC Commercial	149.62	215.76
12.	HTI/Industrial – Connected at 11/33 kV	1,559.37	1,574.96
13.	HTI/Industrial – Connected at 110 kV		333.52
14.	HTSF Industrial (Ferro/SM/PI/SR)	608.08	587.45
15.	HTAG/HT-AGP (Pump Sets/Irrigation)	18.79	6.26
16.	HTAG/HT-AG (Allied Activities)		16.44
17.	HTMES /Defense Establishments	27.58	36.45





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S/No	Category of Consumer	Approved in MYT Order dated 31 <sup>st</sup> March, 2022	Projections for FY 2024-25
<b>C. TEMPORARY SUPPLY</b>			
18.	LT-Temporary Domestic	9.77	3.74
19.	LT-Temporary Commercial		27.62
20.	HT-Temporary	2.33	5.62
<b>D. SINGLE POINT SUPPLY</b>			
21.	Residential Complexes	-	-
22.	Commercial Complexes	5.79	7.00
23.	Industrial Complexes	-	-
<b>E. OTHER CATEGORIES</b>			
24.	EV Charging Stations	-	30.03
<b>Total</b>		<b>4,535.68</b>	<b>5,021.76</b>

CAGR considered for Sales:

Table 0-2: CAGR considered for Sales of FY 2024-25

S/No	Sales (MUs)	Actual FY 23-24 (H1)	Growth Rate (%)	Basis	Estimated FY 2023-24	Projection FY 2024-25
<b>A.</b>	<b>LT</b>	<b>1,093.00</b>			<b>2,053.06</b>	<b>2176.50</b>
	- Domestic	742.22	6.20%	3-year CAGR	1,370.21	1,455.17
	- Non Domestic	268.77	4.89%	4-year CAGR	523.28	548.85
	- LT Industrial	44.09	8.31%	Assumption	88.85	96.23
	- LT Agriculture	8.51	2.33%	3-year CAGR	20.47	20.95
	- Public Lighting	29.32	10%	Assumption	50.13	55.14
	- Hoardings/Signboards	0.08	17.80%	3-year CAGR	0.14	0.16
<b>B.</b>	<b>HT</b>	<b>1,260.00</b>			<b>2,563.04</b>	<b>2,771.26</b>
	- HT Domestic	0.20	2.46%	5-year CAGR	0.40	0.41
	- HT Commercial	96.51	11.45%	4-year CAGR	193.59	215.76
	- HT Industrial	1,135.58	8%	Assumption	2,311.05	2,495.93
	- HT Agriculture	9.73	2%	Assumption	22.25	22.70
	- HT-MES/Defence Establishments	17.98	2%	Assumption	35.74	36.45
<b>C.</b>	<b>Temporary</b>	<b>15.08</b>	14%	2-year CAGR	<b>32.44</b>	<b>36.98</b>
<b>D.</b>	<b>Single Point Supply</b>	<b>3.31</b>	0.47%	3-year CAGR	<b>6.97</b>	<b>7.00</b>
<b>E.</b>	<b>Others</b>	<b>2.73</b>			<b>5.63</b>	<b>30.03</b>
	- EV Charging Stations	2.73		Anticipated	5.63	30.03
<b>F.</b>	<b>Total</b>	<b>2,374.11</b>			<b>4,661.14</b>	<b>5,021.76</b>

**Note:** After considering the CAGR, assumptions for certain category of consumers were resulting



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in the projection of lower sales for FY 2024-25 comparing to the estimated sales for FY 2023-24. EDG anticipates an increase in sales growth for the upcoming year, i.e., FY 2024-25, hence, some tentative assumptions have been considered for such category of consumers in order to escalate the sales as compared to the prior period sales.

The Hon'ble Commission is requested to approve the revised Sales figures considered in the table above for ARR of FY 2024-25. The figures for energy sales for FY 2024-25 are provided in Format 5 of Tariff Filing Formats.

**No. of Consumers:**

The consumer base of Goa comprises HT Industry, LT Industry, Commercial and Domestic consumers with the maximum number of consumers attributable to the domestic category. For the purpose of ARR for FY 2024-25, EDG has extrapolated the figures of No. of Consumers determined for APR of FY 2023-24 with 3, 4, & 5-year CAGR along with certain assumptions and in case of (-) negative CAGR assumption of 3% is considered.

As stated in the Sales section, EGD anticipates new connections from IOCL. The same has been considered in the projection of Number of consumers for FY 2024-25.

The figures of No. of Consumers is provided in the Format 5 of this petition. The table below shows category-wise number of consumers considered for FY 2024-25 vis-à-vis number of consumers approved by the Hon'ble Commission in the MYT Business Plan Order dated 31<sup>st</sup> March, 2022.

**Table 0-3: Number of Consumers for FY 2024-25 (Nos.)**

S/No	Category of Consumer	Approved in MYT Order dated 31 <sup>st</sup> March, 2022	Projections for FY 2024-25
<b>A. LOW TENSION SUPPLY</b>			
1.	LTD/Domestic	6,37,065	5,81,033
2.	LT-LIG (Low income Group)	1,314	843
3.	LTC/Commercial	1,13,989	1,13,153
4.	LTI/ Industrial	5,799	5,933
5.	LT Mixed/ LT-P Hotel Industries	125	118
6.	LTAG/LT-AGP (Pump Sets/Irrigation)	13,111	13,317
7.	LTAG/LT-AGA (Allied Activities)		335
8.	LTPL Public lighting	1,097	7,149
9.	LT Hoarding /Signboard	47	81
<b>B. HIGH TENSION SUPPLY</b>			
10.	HTD Domestic	3	5
11.	HTC Commercial	341	373
12.	HTI/Industrial – Connected at 11/33 kV	1,046	836
13.	HTI/Industrial – Connected at 110 kV		7
14.	High Tension-Ferro/SM/PI/SR	26	24
15.	HTAG/HT-AGP (Pump Sets/Irrigation)	49	46



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S/No	Category of Consumer	Approved in MYT Order dated 31 <sup>st</sup> March, 2022	Projections for FY 2024-25
16.	HTAG/HT-AG (Allied Activities)		3
17.	HTMES /Defense Establishments	15	15
<b>C. TEMPORARY SUPPLY</b>			
18.	LT-Temporary Domestic	2,609	1,943
19.	LT-Temporary Commercial		3,460
20.	HT-Temporary	11	17
<b>D. SINGLE POINT SUPPLY</b>			
21.	Residential Complexes	-	-
22.	Commercial Complexes	1	1
23.	Industrial Complexes	-	-
<b>E. OTHER CATEGORIES</b>			
24.	EV Charging Stations	-	48
<b>Total</b>		<b>7,76,648</b>	<b>7,28,741</b>

**CAGR considered for No. of Consumers:**

**Table 0-4: CAGR considered for No. of Consumers for FY 2024-25**

S/No	Number of Consumers (Nos.)	Actual FY 23-24 (H1)	Growth Rate (%)	Basis	Estimated FY 2023-24	Projection FY 2024-25
<b>A.</b>	<b>LT</b>	<b>6,98,319</b>			<b>7,05,956</b>	<b>7,21,963</b>
	- Domestic	5,63,634	2.18%	5-year CAGR	5,69,479	5,81,876
	- Non Domestic	1,09,303	2.56%	5-year CAGR	1,10,448	1,13,271
	- LT Industrial	5,538	3%	Assumption	5,760	5,933
	- LT Agriculture	12,982	3%	Assumption	13,255	13,653
	- Street Light	6,789	3%	Assumption	6,941	7,149
	- Hoardings/Signboards	73	11%	Assumption	73	81
<b>B.</b>	<b>HT</b>	<b>1,226</b>			<b>1,256</b>	<b>1,309</b>
	- HT Domestic	5			5	5
	- HT Commercial	327	8.62%	5-year CAGR	343	373
	- HT Industrial	833	2.68%	5-year CAGR	845	868
	- HT Agriculture	47	1.79%	5-year CAGR	48	49
	- HT-MES/Defence Establishments	14	3.13%	5-year CAGR	14	15
<b>C.</b>	<b>Temporary</b>	<b>5,344</b>			<b>5,420</b>	<b>5,420</b>
<b>D.</b>	<b>Single Point Supply</b>	<b>1</b>			<b>1</b>	<b>1</b>
<b>E.</b>	<b>Others</b>	<b>7</b>			<b>10</b>	<b>10</b>
	- EV Charging Stations	7	100%	Assumption	10	48
<b>F.</b>	<b>Total</b>	<b>7,04,890</b>			<b>7,12,633</b>	<b>7,28,741</b>



**Note:** Tentative assumptions for certain category of consumers have been considered as elaborated in the Sales section.

The Hon'ble Commission is requested to approve number of consumers for ARR of FY 2024-25 as submitted in the above table. The figures for number of consumers for FY 2024-25 are provided in Format 5 of Tariff Filing Formats.

#### Connected Load:

For the purpose of ARR for FY 2024-25, EDG has extrapolated the figures of Connected Load determined for APR of FY 2023-24 with 3,4, & 5-year CAGR along with certain assumptions and in case of (-) negative CAGR, assumption of 3% is considered.

As stated in the above sections, EGD anticipates new connections from IOCL. The same has been considered in the projection of Connected Load for FY 2024-25.

The figures of Connected Load is provided in the Format 5 of this Petition. The table below shows category-wise consumer's connected load considered for FY 2024-25 vis-à-vis connected load of consumers approved by the Hon'ble Commission in the MYT Business Plan Order dated 31<sup>st</sup> March, 2022.

**Table 0-5: Connected Load for FY 2024-25 (kW)**

S/No	Category of Consumer	Approved in MYT Order dated 31 <sup>st</sup> March, 2022	Projections for FY 2024-25
<b>A. LOW TENSION SUPPLY</b>			
1.	LTD/Domestic	20,13,980	19,91,172
2.	LT-LIG (Low income Group)	117	93
3.	LTC/Commercial	4,47,305	4,72,324
4.	LTI/ Industrial	1,51,598	1,21,714
5.	LT Mixed/ LT-P Hotel Industries	2,757	2,555
6.	LTAG/LT-AGP (Pump Sets/Irrigation)	55,942	38,193
7.	LTAG/LT-AGA (Allied Activities)		1,984
8.	LTPL Public lighting	3,212	15,690
9.	LT Hoarding /Signboard	567	634
<b>B. HIGH TENSION SUPPLY</b>			
10.	HTD Domestic	300	481
11.	HTC Commercial	95,681	1,30,875
12.	HTI/Industrial – Connected at 11/33 kV	6,83,619	5,03,761
13.	HTI/Industrial – Connected at 110 kV		72,186
14.	HTSF Industrial (Ferro/SM/PI/SR)	95,340	1,11,067
15.	HTAG/HT-AGP (Pump Sets/Irrigation)	13,579	11,684
16.	HTAG/HT-AG (Allied Activities)		2,370



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S/No	Category of Consumer	Approved in MYT Order dated 31 <sup>st</sup> March, 2022	Projections for FY 2024-25
17.	HTMES /Defense Establishments	9,045	9,431
<b>C. TEMPORARY SUPPLY</b>			
18.	LT-Temporary Domestic	9,107	4,758
19.	LT-Temporary Commercial		20,098
20.	HT-Temporary	2,468	3,300
<b>D. Single Point Supply</b>			
21.	Residential Complexes	-	-
22.	Commercial Complexes	4,035	2,400
23.	Industrial Complexes	-	-
<b>E. OTHER CATEGORIES</b>			
24.	EV Charging Stations	-	1,871
<b>Total</b>		<b>35,88,653</b>	<b>35,18,641</b>

**CAGR considered for Connected Load:**

**Table 0-6: CAGR considered for Connected Load for FY 2024-25**

S/No	Connected Load (kW)	Actual FY 23-24 (H1)	Growth Rate (%)	Basis	Estimated FY 2023-24	Projection FY 2024-25
<b>A.</b>	<b>LT</b>	<b>24,52,805</b>			<b>25,09,570</b>	<b>26,44,359</b>
	- Domestic	18,45,321	5.42%	4-year CAGR	18,88,858	19,91,265
	- Non-Domestic	4,39,304	6.06%	4-year CAGR	4,47,743	4,74,879
	- LT Industrial	1,14,582	3%	Assumption	1,18,169	1,21,714
	- LT Agriculture	38,185	3%	Assumption	39,007	40,177
	- Street Light	14,855	3%	Assumption	15,233	15,690
	- Hoardings/Signboards	557	13%	Assumption	561	634
<b>B.</b>	<b>HT</b>	<b>8,08,253</b>			<b>8,17,276</b>	<b>8,41,855</b>
	- HT Domestic	481			481	481
	- HT Commercial	1,11,371	9.17%	5-year CAGR	1,19,883	1,30,875
	- HT Industrial	6,74,278	1.89%	4-year CAGR	6,74,302	6,87,014
	- HT Agriculture	12,979	4.37%	4-year CAGR	13,466	14,054
	- HT-MES/Defense	9,144	3.14%	4-year CAGR	9,144	9,431
<b>C.</b>	<b>Temporary</b>	28,156			28,156	28,156
<b>D.</b>	<b>Single Point Supply</b>	2,400			2,400	2,400
<b>E.</b>	<b>Others</b>	<b>387</b>			<b>388</b>	<b>388</b>
	- EV Charging Stations	387	85%	Assumption	388	1871
<b>F.</b>	<b>Total</b>	<b>32,92,001</b>			<b>33,57,790</b>	<b>35,18,641</b>



**Note:** Tentative assumptions for certain category of consumers have been considered as elaborated in the Sales section.

The Hon'ble Commission is requested to approve the Connected Load for ARR of FY 2024-25 as submitted in the above table. The details of Connected Load for FY 2024-25 are provided in Format 5 of Tariff Filing Formats.

### T&D Loss for FY 2024-25

EDG has considered the actual transmission losses of H1 of FY 2023-24 as the revised transmission (PGCIL) losses for FY 2024-25. The following table shows the transmission losses that are considered for energy projections:

**Table 0-7: Inter-State Transmission Loss Projections (%)**

Region	FY 2023-24	FY 2024-25
Western Region	3.11%	3.11%
Southern Region	4.21%	4.21%
<b>Total</b>	<b>3.29%</b>	<b>3.29%</b>

EDG has been working hard to reduce its Distribution losses to the targets approved by the Hon'ble Commission in the previous Tariff Order and has reduced some of its Distribution Loss due to implementation of SAP, R-APDRP Part A schemes, resolving billing issues, transition of billing and collection agencies and infusion of funds to strengthen and improve the distribution network. As the issues are resolved and billing, etc., is done through SAP, the actual distribution losses observed for FY 2022-23 are 7.41%. Hence, EDG has considered the target distribution loss for FY 2024-25 as 7.41%.

Further, EDG submits that it would further invest in the capital expenditure during the Control Period to further optimise the technical losses and commercial losses.

EDG has proposed the Distribution Loss for FY 2024-25 as tabulated below:

**Table 0-8: Distribution Loss for FY 2024-25 (%)**

Particulars	FY 2024-25
	%
Transmission and Distribution Loss	7.41

### Energy Balance

Based on the Sales and distribution loss, and PGCIL losses for FY 2023-24 and FY 2024-25, the energy requirement has been projected by EDG. The Energy balance for FY 2023-24 and FY 2024-25 is shown in the following table:

**Table 0-9: Energy Balance for FY 2024-25 (Periphery wise) (MUs)**

Particulars	Estimated	Projected
	FY 2023-24	FY 2024-25
	Total	Total
Energy Input at Goa Periphery	4,901.23	5,224.15



Particulars	Estimated	Projected
	FY 2023-24	FY 2024-25
	Total	Total
<b>Total Power Scheduled/ Purchased at Goa Periphery</b>		
<i>Total Schedule Billed Drawal - CGS</i>	4,209.40	4,266.14
<i>Add: Overdrawal</i>	30.89	-
<i>Add: Power purchase from NVVN / Banking</i>	(72.39)	43.28
<i>Add: Power purchase from Traders/ Open Market</i>	238.43	43.80
<i>Add : Hydro Power</i>	-	-
<i>Less: Underdrawal</i>	5.88	-
<i>Add: Renewable Power</i>	863.93	1,047.26
<i>Less: Power diverted to Exchange</i>	193.28	-
<b>Total</b>	<b>5,071.10</b>	<b>5,400.49</b>
<b>PGCIL Losses - MUs</b>	<b>169.87</b>	<b>176.33</b>
<b>PGCIL Losses - %</b>	<b>3.29%</b>	<b>3.29%</b>
<b>Total Power Purchased within Goa State</b>		
<i>Add: Co-generation</i>	123.04	139.61
<i>Add: Independent Power Producers (IPP)</i>	-	-
<i>Add: Net Metering</i>	-	-
<i>Add: PM KUSUM</i>	-	50.00
<i>Add: Hindustan Waste Treatment Plant</i>	10.00	10.00
<b>Total</b>	<b>133.04</b>	<b>199.61</b>
<b>Total Power Purchase availability after PGCIL Losses</b>	<b>5,034.27</b>	<b>5,423.76</b>
<b>Power Purchase required (MU)</b>	<b>5,034.27</b>	<b>5,423.76</b>
<i>Less: Retail Sales to Consumers</i>	4,661.14	5,021.76
<i>Distribution Losses - MUs</i>	373.13	402.00
<b>Distribution Losses - %</b>	<b>7.41%</b>	<b>7.41%</b>

### Power Purchase quantum and Cost for FY 2024-25

The MYT Regulations, 2021 specifies as under with respect to cost of power purchase.

#### **“59 Cost of Power Purchase**

*59.1 The Distribution Licensee shall be allowed to recover the cost of power generated by the Generating Stations owned by it or purchased from approved sources for supply to Consumers based on the power procurement plan of the Distribution Licensee, approved by the Commission.”*



Following is the projected Power purchase quantum and cost for FY 2024-25:

**Table 0-10: Power Purchase Quantum for FY 2024-25**

Particulars	Gross Purchase	Cost	Rate
	(MUs)	(Rs. Crore)	(Rs./kWh)
<b>NTPC</b>	3,974.08	1,270.13	3.20
<b>NPCIL</b>	292.06	117.24	4.01
<b>IEX (Net of Purchase and Sales)</b>	43.80	28.01	6.40
<i>IEX Purchase (Peak Hrs.)</i>	43.80	28.01	6.40
<i>IEX Sale (Off Peak Hrs.)</i>	-	-	-
<b>Traders (Net of Drawal &amp; Injection)</b>	-	-	-
<b>UI (Net Over-drawal)</b>	-	-	-
<b>Co-Generation</b>	139.61	33.51	2.40
<b>Renewable</b>	1,107.26	469.59	4.24
<b>Transmission Charges</b>	-	305.48	-
<b>Banking of Power (Net)</b>	43.28	-	-
<b>TOTAL</b>	<b>5,600.09</b>	<b>2,223.96</b>	<b>3.97</b>

Power purchase quantum projected above is based on the FY 2023-24 H1 actuals and projections for FY 2023-24 H2. The major Power Purchase for EDG is from Central Generating Stations, and the actual energy received from the CGS is higher than that of the normative energy generation as per the actual PLF. So EDG has projected the Power Purchase based on the actual energy delivered. Further, 43.80 MUs of additional power from the market/traders is considered to meet the projected energy requirement. However, deficit if any shall be met from the Open market/Exchanges/Traders.

Further, EDG submits that the 11<sup>th</sup> & 12<sup>th</sup> monthly instalments of the arrear bill amounting to Rs. 11.40 Crore to NPCIL due to the revision in tariff rates of Kakrapar Atomic Power Station-1&2 (**Annexure-5**) has been accounted in the FY 2024-25 power purchase projection under-KAPS 1&2 (Adjustment).

**Fixed Cost for Central Generating Stations:** - As CERC has still not issued the Order for the Control Period for most of the Plants, EDG has considered actual fixed charges paid to the plant in H1 of FY 2023-24 to arrive at the revised projections of base year FY 2023-24 for respective Central Generating Stations and the same is considered for FY 2024-25.

**Table 0-11: Power Purchase Cost - Fixed Cost for FY 2024-25**

S/No	Source	Projected Fixed Cost (FC)
		(Rs. Crore)
A. Central Generating Stations		
I	NTPC	425.33
1.	KSTPS	112.94
2.	VSTPS - I	24.18





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S/No	Source	Projected Fixed Cost (FC)
		(Rs. Crore)
3.	VSTPS - II	8.43
4.	VSTPS -III	8.61
5.	VSTPS-IV	18.62
6.	VSTPS-V	9.06
7.	KGPP	7.78
8.	GGPP	9.46
9.	SIPAT- I	24.21
10.	KSTPS-III	5.43
11.	RSTPS	50.00
12.	SIPAT- II	9.13
13.	Solapur	24.33
14.	Gadarwara	32.31
15.	Lara	17.34
16.	Khargone	22.99
17.	Mouda I	17.34
18.	Mouda II	23.16
<b>II</b>	<b>NPCIL</b>	-
1.	KAPS 1&2	-
2.	KAPS 3&4	-
3.	KAPS 1&2 (Adjustment)	-
4.	TAPS	-
<b>B. Traders</b>		
1.	IEX PURCHASE AND SALES	-
	IEX PURCHASE	-
	IEX SALES	-
2.	Traders Drawal	-
	Traders Injection	-
<b>C. Over/ Under Drawal</b>		
1.	Over Drawal	-
2.	Under Drawal	-
<b>D. Banking of Power</b>		
<b>E. Within State Generations</b>		
<b>I</b>	<b>CO- GENERATION</b>	-
1.	Vedanta Plant-1	-
2.	Vedanta Plant -2	-
3.	Goa Sponge and private limited	-



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S/No	Source	Projected Fixed Cost (FC)
		(Rs. Crore)
F. RPO		
I	Solar	-
1.	NVVNL Solar	-
2.	Solar STOA	-
3.	SECI Solar	-
4.	Net Metering	-
5.	PM KUSUM	-
II	Non-Solar	-
1.	SECI Wind Tranche II LTOA	-
2.	STOA (Non Solar)	-
3.	SECI Wind Tranche-VI	-
4.	SECI 150 MW	-
5.	Hindustan waste treatment plant Goa	-
G. REC Certificates		-
H. OTHER CHARGES		
1.	PGCIL Charges	305.48
Total		730.81

**Variable Cost for Central Generating Stations:** The Petitioner has considered the actual per unit variable costs for FY 2023-24 H1 and same is considered for FY 2024-25, as there is a decrease in the per unit variable cost observed in the NTPC Power Stations. Any variation in Variable Cost for FY 2024-25 will be considered as part of fuel price adjustment.

For Solar and Non-Solar firm power, the rates as per the PPA are considered for FY 2024-25 without any escalation.

To fulfil the RPO compliance, the deficit renewable power as per the EDG's obligation is compensated by procuring renewable power (Solar and Non-Solar) from the Short-Term Market. The GTAM rates as per the actuals of H1 FY 2023-24 is considered for FY 2023-24 H2 without any escalation. The market rates as per actuals of H1 FY 2023-24 is considered for FY 2024-25.

**Table 0-12: Power Purchase Cost - Variable Cost for FY 2024-25**

S/No	Source	Projected Variable Cost (VC)	
		(Paise/unit)	(Rs. Crore)
A. Central Generating Stations			
I	NTPC	212.58	844.80
1.	KSTPS	142.47	236.14



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S/No	Source	Projected Variable Cost (VC)	
		(Paise/unit)	(Rs. Crore)
2.	VSTPS - I	158.77	43.21
3.	VSTPS - II	153.08	17.81
4.	VSTPS -III	151.83	14.89
5.	VSTPS-IV	149.80	19.37
6.	VSTPS-V	155.05	9.03
7.	KGPP	1,159.20	0.00
8.	GGPP	-	-
9.	SIPAT- I	135.19	27.36
10.	KSTPS-III	139.51	6.75
11.	RSTPS	372.01	249.40
12.	SIPAT- II	139.38	13.79
13.	Solapur	445.72	33.92
14.	Gadarwara	359.62	46.07
15.	Lara	136.40	15.04
16.	Khargone	392.22	26.74
17.	Mouda I	352.75	36.40
18.	Mouda II	357.90	48.87
II	<b>NPCIL</b>	<b>401.41</b>	<b>117.24</b>
1.	KAPS 1&2	342.26	41.25
2.	KAPS 3&4 PP	440.00	24.86
3.	KAPS 3&4	-	11.40
4.	TAPS	345.36	39.73
<b>B. Traders</b>			<b>28.01</b>
1.	IEX PURCHASE AND SALES	639.55	28.01
	IEX PURCHASE	639.55	28.01
	IEX SALES	-	-
2.	Traders Drawal	-	-
	Traders Injection	-	-
<b>C. Over/ Under Drawal</b>			
1.	Over Drawal	-	-
2.	Under Drawal	-	-
<b>D. Banking of Power</b>			-
<b>E. Within State Generations</b>			
I	<b>CO- GENERATION</b>	<b>240.00</b>	<b>33.51</b>
1.	Vedanta Plant-1	240.00	15.35
2.	Vedanta Plant -2	240.00	16.77
3.	Goa Sponge and private limited	240.00	1.38



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S/No	Source	Projected Variable Cost (VC)	
		(Paise/unit)	(Rs. Crore)
F. RPO			469.59
I	Solar	509.17	169.27
1.	NVVNL Solar	565.56	7.59
2.	Solar STOA	510.00	111.54
3.	SECI Solar	591.00	29.75
4.	Net Metering	-	-
5.	PM KUSUM	408.00	20.40
II	Non-Solar	387.60	300.32
1.	SECI Wind Tranche II LTOA	271.00	37.79
2.	STOA (Non Solar)	505.00	126.25
3.	SECI Wind Tranche-VI	289.00	50.67
4.	SECI 150 MW	403.00	80.60
5.	Hindustan waste treatment plant Goa	500.00	5.00
G. REC Certificates		-	-
H. OTHER CHARGES			
1.	PGCIL Charges	-	-
Total		266.63	1.493.15

**Projected Power Purchase from within the State:**

EDG has tied up power from three Co-Generating Plants within the State, namely Vedanta Pvt. Ltd. Plant I, Goa Sponge and Power Limited (GSPL) and Vedanta Pvt. Ltd. Plant II. The total energy projection from above three plants for FY 2024-25 is based on actual energy received in H1 of FY 2023-24 and FY 2022-23 at the same rates.

**Purchase from Solar:**

EDG has been procuring power from Renewable Sources whereby 6 MW Solar Power is procured from NVVN, and 25 MW from SECI to meet its RPO obligations.

Further, EDG has planned tie-ups of Renewable Energy during the Control Period to meet its RPO obligations and the same has been discussed in the earlier section of Upcoming Power plant. However, the same has also been reproduced here below.

Further, EDG is also expecting the consumers to go for solar rooftops under the Net Metering/ Gross Metering arrangement. Here, based on the past performances of the Consumers most of the consumers having Net-Metering setup has consumed the entire generation and further drawn power from EDG Network. In this regard, EDG has considered 75.69 MUs of energy from the Net Metering Consumers in the RPO for self-consumption without injecting into the grid. As



the actual Net-Metering settlement is performed in the end of the year, the units generated and injected will be accounted in the True-up accordingly for FY 2024-25.

Apart from above, to meet any shortfall (if any) and to fulfil the Solar RPO, EDG shall purchase power through short-term (Traders) through GTAM.

**Purchase from Non-Solar:**

EDG would be procuring non-solar Renewable power for meeting the RPO in FY 2024-25 through short-term market. ED-Goa has procured 2.26 MUs (for FY 2023-24 H1) and it is projected to receive 7.74 MUs in FY 2023-24 H2 from Hindustan Waste Energy Ltd as it has increased the capacity of the project. Accordingly, it is projected that 10 MUs will be supplied by Hindustan Waste Energy Ltd for FY 2024-25.

Further, the EDG is receiving power from SECI Tranche II 50 MW Wind power and procuring the power at a rate of Rs. 2.72/unit plus trading margin of Rs. 0.07/kWh at Goa periphery since August 2022. The actual energy delivered by SECI Tranche II 50 MW, for FY 2023-24 H1 is 64.76 MU. Accordingly for FY 2024-25, it is projected as 139.46 MUs based on the Energy flow of Wind Power in the past.

EDG submits that it has executed a Power Sale Agreement (PSA) on 16<sup>th</sup> August 2019 with SECI for Procurement of 50 MW Wind Power (Tranche VI) for 25 years at a fixed tariff for Rs. 2.82/kWh plus trading margin of Rs. 0.07/kWh for fulfilment of Non-Solar RPO. EDG has started receiving the Power from September 2022 and in line with the SECI Tranche II 50 MW Wind power, the projections considered in quantum are of 139.46 MUs for FY 2024-25.

EDG has signed Power purchase Agreement with SECI 150 MW RTC Peak Power from Hybrid source of Renewable Power comprising Solar, Wind and Battery Energy Storage System (BESS) provides assured Peak Power to compensate the Peak Deficit of Goa. The project contributes to Peak Power compensation and RPO as well. The project envisages the supply 200 MUs/year of wind capacity, to start from March 2024 onwards at the rate of Rs. 4.03 /unit at Goa periphery as per the PPA.

Apart from above, to meet any shortfall (if any) and to fulfil the Non-Solar RPO obligation, EDG shall purchase power through short term (Traders) through GTAM.

**Renewable Purchase Obligation:**

As discussed above, EDG envisages to meet its RPO through purchase of physical renewable power and may even exceed the RPO as cheap power is available in the market, in comparison to the conventional sources. Further, after considering all the proposed tied-up renewable energy, EDG proposes to meet any shortfall to fulfil the RPO, through purchase from short term (Traders) through GTAM. For projection, EDG plans to buy REC for FY 2024-25.

As per the new draft notification by the Hon'ble JERC on Procurement of Renewable Energy (5<sup>th</sup> Amendment) Regulations, 2023 dated 1<sup>st</sup> August, 2023 (attached in **Annexure-7** of this petition), EDG has taken the announced approach for the RPO for FY 2024-25. The said Regulation has introduced Hydro Power Obligation (HPO). The Solar RPO has been adjusted in Other RPO, meanwhile Wind RPO still exists.

The following table shows the Renewable Purchase Obligation for Solar and Non Solar for EDG for FY 2024-25.



**Table 0-13: RPO obligation and compliance for FY 2024-25**

S/No	Description	Unit	Projections
			FY 2024-25
1.	Sales Within State	MUs	5021.76
2.	RPO Obligation	%	29.91%
	Wind RPO	%	2.46%
	Other RPO	%	26.37%
	HPO	%	1.08%
3.	RPO Obligation	MUs	1502.01
	Wind RPO	MUs	123.54
	Other RPO	MUs	1324.24
	HPO	MUs	54.24
4.	Power Purchase	MUs	1182.95
	Wind RPO	MUs	375.34
	Other RPO	MUs	807.61*
	HPO	MUs	0.00

\*This includes 75.69 MUs of self-Consumption of the Net-Metering Consumers.

#### Renewable Energy Certificate:

For FY 2024-25, EDG has anticipated surplus Wind RPO of 251.81 MU, which will be used for adjustment with other RPO deficits. The calculations are given in the table below:

**Table 0-14: Wind REC requirement calculation for FY 2024-25**

S/No	Wind REC requirement calculation	MU
1.	Total Wind RPO target for FY 2024-25	123.54
2.	Wind Power procurement for FY 2024-25	375.34
3.	Surplus (-)/ Deficit (+) <b>(1-2)</b>	(251.81)
4.	Surplus Wind RPO to be adjusted with Other RPO	(251.81)
5.	Remaining Wind RPO after adjustment with Other RPO Deficit	0.00
6.	Surplus (-)/ Deficit (+)	0.00

Balance deficit for Other RPO of 206.66 will be met by purchase of RECs.

**Table 0-15 Other RPO REC requirement calculation for FY 2024-25**

S/No	Other RPO REC requirement calculation	MU
1.	Total Other RPO target for FY 2024-25	1324.24



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S/No	Other RPO REC requirement calculation	MU
2.	Surplus (-)/ Deficit (+) <b>(Carry forwarded from Non-Solar RPO to Other RPO from FY 2023-24)</b>	(58.16)
3.	RPO target for FY 2024-25 after adjustments with the surplus <b>(1-2)</b>	1266.08
4.	Other RPO Power Procurement for FY 2024-25	807.61
5.	Surplus (-)/ Deficit (+) <b>(3-4)</b>	458.47
6.	Wind RPO adjustment with other RPO Deficit	251.81
7.	Surplus (-)/ Deficit (+) <b>(5-6)</b>	206.66
8.	<b>REC's to be purchased (+)/ Carry forward to next year (-)</b>	<b>206.66</b>

Table 0-16 HPO REC requirement calculation for FY 2024-25

S/No	HPO REC requirement calculation	MU
1.	Total HPO target for FY 2024-25	54.24
2.	HPO power procurement for FY 2024-25	0.00
3.	Surplus (-)/ Deficit (+) <b>(1-2)</b>	54.24
4.	Remaining Wind RPO after adjustment with HPO Deficit	0.00
5.	Surplus (-)/ Deficit (+)	54.24
6.	<b>REC's to be purchased (+)/ Carry forward to next year (-)</b>	54.24

Since, no other surplus RPO is anticipated, the deficit of 54.24 MU of HPO will be fulfilled by the purchase of REC's or will be carried forward to next year. The calculations are given in the table above.

The RPO compliance projections for FY 2024-25 with and without considering the purchase of REC is given in the table below:

Table 0-17 RPO & REC projections for FY 2024-25

Particulars	Projections FY 2024-25	
	Without REC	With REC
Sales within State (MU)	5,021.76	5,021.76
RPO (in %)	<b>29.91%</b>	<b>29.91%</b>
Wind RPO	2.46%	2.46%
Other RPO	26.37%	26.37%



Particulars	Projections FY 2024-25	
	Without REC	With REC
HPO	1.08%	1.08%
<b>RPO for the year (in MU)</b>	<b>1,502.01</b>	<b>1,502.01</b>
Wind RPO	123.54	123.54
Other RPO	1,324.24	1,324.24
HPO	54.24	54.24
<b>Backlog RPO from previous year (in MU)</b>	<b>71.67</b>	<b>(58.16)</b>
Wind RPO	-	-
Other RPO	<b>71.67</b>	<b>(58.16)</b>
HPO	-	-
<b>Cumulative RPO Target for the year (in MU)</b>	<b>1,573.68</b>	<b>1,443.85</b>
Wind RPO	123.54	123.54
Other RPO	1,395.91	1,266.08
HPO	54.24	54.24
<b>RPO Compliance (MU)</b>	<b>1,182.95</b>	<b>1,182.95</b>
Wind RPO	375.34	375.34
Other RPO	807.61	807.61
HPO	0.00	0.00
<b>Cumulative RPO Shortfall (MU)</b>	<b>390.72</b>	<b>260.90</b>
Wind RPO	(251.81)	(251.81)
Other RPO	588.30	458.47
HPO	54.24	54.24

After adjustment of the surplus WIND RPO 251.81 MUs with Other RPO, there is a deficit of 206.66 MUs of Other RPO. Further, as on date there is no firm tie-up to fulfil the 54.24 MU of HPO. So, to achieve the cumulative shortfall as nil, 260.90 MUs of Solar or Non-Solar REC to be purchased to adjust the deficit. Also, REC's worth 390 MUs of cumulative shortfall has to be purchased if the deficit from FY 2023-24 gets adjusted in FY 2024-25 due to non-buying of REC.

#### Energy Storage Obligation (ESO):

Further, Energy Storage Obligation (ESO) has been introduced in the draft Regulations mentioned in the RPO section. EDG envisages a Battery Energy Storage System with wind generated energy source in FY 2024-25 for the fulfilment of the same. ESO compliance projection for FY 2024-25 has been given in table below:

**Table 0-18 ESO compliance projection for FY 2024-25**

S/No	Particulars	FY 2024-25
1.	<b>Sales within State (MU) (A)</b>	<b>5021.76</b>
2.	Hydro Power available at State Periphery (MU) (B)	0
3.	Distribution Loss (%) (C)	7.41%
4.	Distribution Loss (MU) (D = B * C)	0
5.	Hydro Power Consumed (E = B - D)	0





S/No	Particulars	FY 2024-25
6.	Conventional Power Consumed (F = A - E)	5021.76
7.	ESO (%)	1.50%
8.	BESS (G)	1.50%
9.	ESO for the YEAR (MU)	75.33
10.	BESS (F * G)	75.33
11.	ESO Compliance (Physical Power + Certificates) (MU)	200.00
12.	BESS	200.00
13.	ESO Shortfall(+)/Excess(-) (MU)	(124.67)
14.	BESS	(124.67)
15.	ESO Compliance(MU)	75.33
16.	BESS	265.51%

The ESO is fulfilled by the SECI 150 MW Wind dominated Solar Hybrid Power with BESS. It is expected that 200 MUs of Power to be delivered in FY 2024-25 and suitable Certification for the energy stored in the BESS will also be provided for the Energy Storage Obligation.

#### Power Purchase from Traders/ Short Term:

ED-Goa also expects to purchase power in Short-term from Exchanges or Traders to fulfil its peak or shortfall requirements. Further, EDG also expects some surplus to be available during off-peak hours and would indulge in Banking or sale of power in Exchanges on real-time basis.

For FY 2024-25, EDG has considered purchase of 43.80 MU power from the Traders/Exchange/short-term at a rate of Rs. 6.40 /unit depending upon the past rates considering the rates from January 2023 to October 2023 DAM-RTC.

#### Power Purchase from New/Upcoming Stations:

EDG has no power purchase planned from the upcoming thermal generating stations. EDG has planned the tie-ups of Renewable Energy both outside and within the State for FY 2024-25 to meet its RPO. Accordingly, ED-Goa has also considered the upcoming power stations during the Control Period. The same is as under:

EDG has signed Power Purchase Agreement with SECI 150 MW RTC Peak Power from Hybrid source of Renewable Power comprising Solar, Wind and Battery Energy Storage System (BESS), which provides assured Peak Power to compensate the Peak Deficit of Goa. The project contributes to Peak Power compensation and RPO as well. The project envisages the supply of 200 MUs/year of wind capacity only, to start from March 2024 onwards at the rate of Rs. 4.03 /unit at Goa periphery as per the PPA.

Further, EDG is anticipating renewable power from Decentralized Grid connected Solar Power Plants under PM KUSUM scheme for FY 2024-25. The Petitioner would like to highlight that EDG has been receiving requests from farmers, who have been issued connectivity by Goa Energy



Development Agency (GEDA) under KUSUM A, for signing PPA for the projects. While the Hon`ble Commission has approved the rate of Rs. 4.08/kWh for KUSUM-A, vide order dated 23.8.2023 under '*Petition No. 104/2023 filed under Section 86(1)(b) & 86(1)(e) of the Electricity Act, 2003 for Determination of Levelized Generic Tariff in terms of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM-KUSUM) Scheme for setting up of grid connected solar power plants of individual capacity ranging between 500 kW to 2 MW in the State of Goa under Component-A of the scheme for sale of solar power generated thereof to the Electricity Department Goa in the State of Goa*', the Hon`ble Commission has not approved any standard PPA for the same. Accordingly, EDG is submitting a draft standard PPA for KUSUM-A scheme to be signed between EDG & Farmers/Solar Power Generator, for approval by Hon`ble Commission, attached as **Annexure-3**

EDG has considered the actual transmission charges for H1 of FY 2023-24 and calculated the transmission charges for PGCIL. The same has been considered for computation of Transmission Charges for FY 2024-25.

Based on the above assumptions, power purchase quantum and cost for Central Generating Stations is derived for FY 2024-25.



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As discussed in foregoing paras, following is the station-wise power purchase quantum and cost for FY 2024-25:

**Table 0-19: Power purchase quantum and cost for FY 2024-25**

S/No	Source	Energy Sent out (Scheduled)	External Losses (%)	Energy Received by the Licensee	Variable Charges	Fixed Cost (FC)	Variable Cost (VC)	Other Charges	Supplementary Charges	Total Cost	Per Unit Cost
		(MU)	Interstate	(MU)	Paise/unit	₹ crore	₹ crore	₹ crore	₹ crore	₹ crore	₹/unit
<b>1</b>	<b>Central Generating Stations</b>										
<b>A</b>	<b>Thermal</b>										
<b>a</b>	<b>NTPC</b>	<b>3,974.08</b>		<b>3,813.10</b>		<b>425.33</b>	<b>844.80</b>	-	-	<b>1,270.13</b>	<b>3.33</b>
(i)	KSTPS	1,657.47	3.11%	1,602.94	142.47	112.94	236.14	-	-	349.08	2.18
(ii)	VSTPS - I	272.13	3.11%	263.17	158.77	24.18	43.21	-	-	67.39	2.56
(iii)	VSTPS - II	116.33	3.11%	112.51	153.08	8.43	17.81	-	-	26.24	2.33
(iv)	VSTPS -III	98.06	3.11%	94.83	151.83	8.61	14.89	-	-	23.50	2.48
(v)	VSTPS-IV	129.31	3.11%	125.06	149.80	18.62	19.37	-	-	37.99	3.04
(vi)	VSTPS-V	58.22	3.11%	56.30	155.05	9.06	9.03	-	-	18.09	3.21
(vii)	KGPP	0.00	3.11%	0.00	1,159.20	7.78	0.00	-	-	7.78	-
(viii)	GGPP	-	3.11%	-	-	9.46	-	-	-	9.46	-
(ix)	SIPAT- I	202.41	3.11%	195.75	135.19	24.21	27.36	-	-	51.58	2.63
(x)	KSTPS-VII	48.38	3.11%	46.79	139.51	5.43	6.75	-	-	12.18	2.60
(xi)	RSTPS	670.41	4.21%	618.12	372.01	50.00	249.40	-	-	299.40	4.84
(xii)	SIPAT- II	98.95	3.11%	95.69	139.38	9.13	13.79	-	-	22.92	2.40
(xiii)	Solapur	76.10	3.11%	73.60	445.72	24.33	33.92	-	-	58.25	7.91
(xiv)	Gadarwara	128.12	3.11%	123.91	359.62	32.31	46.07	-	-	78.39	6.33
(xv)	Lara	110.25	3.11%	106.62	136.40	17.34	15.04	-	-	32.38	3.04
(xvi)	Khargone	68.18	3.11%	65.94	392.22	22.99	26.74	-	-	49.74	7.54
(xvii)	Mouda I	103.19	3.11%	99.80	352.75	17.34	36.40	-	-	53.74	5.38
(xviii)	Mouda II	136.56	3.11%	132.07	357.90	23.16	48.87	-	-	72.03	5.45
	Add/ Less: Other Adjustments	-	-	-	-	-	-	-	-	-	-
<b>B</b>	<b>NPCIL</b>	<b>292.06</b>		<b>282.45</b>			<b>117.24</b>			<b>117.24</b>	<b>4.15</b>



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S/No	Source	Energy Sent out (Scheduled)	External Losses (%)	Energy Received by the Licensee	Variable Charges	Fixed Cost (FC)	Variable Cost (VC)	Other Charges	Supplementary Charges	Total Cost	Per Unit Cost
		(MU)	Interstate	(MU)	Paise/unit	₹ crore	₹ crore	₹ crore	₹ crore	₹ crore	₹/unit
(i)	KAPS 1&2	120.52	3.11%	116.55	342.26	-	41.25	-	-	41.25	3.54
(ii)	KAPS 3&4	56.50	3.11%	54.64	440.00	-	24.86	-	-	24.86	4.55
(iii)	KAPS 1&2 (Adjustment)	-	3.11%	-	-	-	11.40	-	-	11.40	-
(iv)	TAPS	115.04	3.11%	111.26	345.36	-	39.73	-	-	39.73	3.57
<b>2</b>	<b>Banking of Power</b>	<b>43.28</b>	-	<b>43.28</b>	-	-	-	-	-	-	-
(i)	Drawal	59.24	-	59.24	-	-	-	-	-	-	-
(ii)	Injection	15.96	-	15.96	-	-	-	-	-	-	-
<b>3</b>	<b>Short- Term Power</b>										
<b>A</b>	<b>Traders</b>	<b>43.80</b>		<b>42.36</b>			<b>28.01</b>			<b>28.01</b>	
(i)	IEX Purchase & Sales	43.80	-	42.36	-	-	28.01	-	-	28.01	-
(ii)	IEX Purchase	43.80	3.11%	42.36	639.55	-	28.01	-	-	28.01	6.61
(iii)	IEX Sales	-	3.11%	-	-	-	-	-	-	-	-
	Traders Drawal	-	3.11%	-	-	-	-	-	-	-	-
	Traders Injection	-	3.11%	-	-	-	-	-	-	-	-
<b>4</b>	<b>Within State Generations</b>										
<b>A</b>	<b>CO- GENERATION</b>	<b>139.61</b>		<b>139.61</b>			<b>33.51</b>			<b>33.51</b>	<b>2.40</b>
(i)	Vedanta Plant-1	63.97	-	63.97	240.00	-	15.35	-	-	15.35	2.40
(ii)	Vedanta Plant-2	69.89	-	69.89	240.00	-	16.77	-	-	16.77	2.40
(iii)	Goa Sponge and private limited	5.75	-	5.75	240.00	-	1.38	-	-	1.38	2.40
<b>5</b>	<b>RPO Obligation</b>	<b>1,107.26</b>		<b>1,041.84</b>						<b>469.59</b>	<b>4.51</b>
<b>A</b>	<b>Solar</b>	<b>332.45</b>		<b>275.26</b>			<b>169.27</b>			<b>169.27</b>	<b>6.15</b>
(i)	NVVNL Solar	13.43	-	13.43	565.56	-	7.59	-	-	7.59	5.66



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S/No	Source	Energy Sent out (Scheduled)	External Losses (%)	Energy Received by the Licensee	Variable Charges	Fixed Cost (FC)	Variable Cost (VC)	Other Charges	Supplementary Charges	Total Cost	Per Unit Cost
		(MU)	Interstate	(MU)	Paise/unit	₹ crore	₹ crore	₹ crore	₹ crore	₹ crore	₹/unit
(ii)	Solar STOA	218.70	3.11%	211.50	510.00	-	111.54	-	-	111.54	5.27
(iii)	SECI Solar	50.33	-	50.33	591.00	-	29.75	-	-	29.75	5.91
(iv)	Net Metering	0.00	-	-	-	-	0.00	-	-	0.00	-
(v)	PM KUSUM	50.00	-	50.00	408.00	-	20.40	-	-	20.40	4.08
<b>B</b>	<b>Non-Solar</b>	<b>774.81</b>		<b>766.58</b>			<b>300.32</b>			<b>300.32</b>	<b>3.92</b>
(i)	SECI Wind Tranche II LTOA	139.46	-	139.46	271.00	-	37.79	-	-	37.79	2.71
(ii)	STOA (Non Solar)	250.00	3.11%	241.78	505.00	-	126.25	-	-	126.25	5.22
(iii)	SECI Tranche-VI	175.34	-	175.34	289.00	-	50.67	-	-	50.67	2.89
(iv)	SECI 150 MW	200.00	-	200.00	403.00	-	80.60	-	-	80.60	4.03
(v)	Hindustan waste treatment plant Goa	10.00	-	10.00	500.00	-	5.00	-	-	5.00	5.00
<b>6</b>	<b>REC Certificates</b>	-	-	-	-	-	-	-	-	-	-
(i)	Solar-REC	-	-	-	-	-	-	-	-	-	-
(ii)	Non Solar- REC	-	-	-	-	-	-	-	-	-	-
<b>7</b>	<b>UI (Net Overdrawal)</b>	-	-	-	-	-	-	-	-	-	-
(i)	OVER DRAWAL	-	-	-	-	-	-	-	-	-	-
(ii)	UNDER DRAWAL	-	-	-	-	-	-	-	-	-	-
<b>8</b>	<b>OTHER CHARGES</b>					<b>305.48</b>				<b>305.48</b>	
	PGCIL Charges	-	-	-	-	305.48		-	-	305.48	-
	<b>Total Power Purchase</b>	<b>5,600.09</b>	-	<b>5,362.64</b>	-	<b>730.81</b>	<b>1,493.15</b>	-	-	<b>2,223.96</b>	<b>3.97</b>

The Hon'ble Commission is kindly requested to approve the total power purchase cost for FY 2024-25 as stated in the table above. The details of the Power Purchase Expenses for FY 2024-25 are provided in Format 3 of Tariff Filing Formats.



## Operation and Maintenance (O&M Expenses)

Operation & Maintenance expenses comprise the following heads of expenditure, viz,

- Employee Expenses
- Administration & General Expenses
- Repairs & Maintenance Expenses.

The MYT Regulations, 2021 specifies that the O&M expenses for the  $n^{\text{th}}$  year of the Control Period shall be approved by the Hon'ble Commission. The relevant extract of the Regulation is reproduced as follows:

*"52.3 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 distribution Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission*

*52.4 O&M expenses for the  $n^{\text{th}}$  Year of the Control Period shall be approved based on the formula given below:*

$$O\&M_n = (R\&M_n + EMP_n + A\&G_n) \times (1 - X_n) + \text{Terminal Liabilities}$$

Where,

$$R\&M_n = K \times GFA_{n-1} \times (1 + WPI_{\text{inflation}})$$

$$EMP_n = (EMP_{n-1}) \times (1 + G_n) \times (1 + CPI_{\text{inflation}})$$

$$A\&G_n = (A\&G_{n-1}) \times (1 + CPI_{\text{inflation}})$$

*'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;*

*CPI<sub>inflation</sub> – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3) Years before the base Year;*

*WPI<sub>inflation</sub> – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three (3) Years before the base Year;*

*EMP<sub>n</sub> – Employee expenses of the Distribution Licensee for the  $n^{\text{th}}$  Year;*

*A&G<sub>n</sub> – Administrative and General Expenses of the Distribution Licensee for the  $n^{\text{th}}$  Year;*

*R&M<sub>n</sub> – Repair and Maintenance expenses of the Distribution Licensee for the  $n^{\text{th}}$  Year;*



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$GFA_{n-1}$  – Gross Fixed Asset of the Distribution Licensee for the  $n-1^{th}$  Year;

$X_n$  is an efficiency factor for  $n^{th}$  Year. Value of  $X_n$  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;

$G_n$  is a growth factor for the  $n^{th}$  Year. Value of  $G_n$  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."

**Employee Expenses:** - While projecting employee cost for FY 2024-25, EDG has considered FY 2023-24 as base year. It is submitted that the last available provisional accounts (submitted to CAG and is due for Audit) is of FY 2022-23. Accordingly, EDG has considered the provisional actual values of FY 2022-23 to compute the values of base year FY 2023-24. Employee expenses for FY 2024-25 is projected based on the methodology specified in the Regulations. For FY 2023-24 (base year), employee expenses are arrived by escalating the average of FY 2021-22 by considering the average of FY 2020-21, FY 2021-22, FY 2022-23 by Consumer Price Index (CPI). As per Regulations, average CPI of three preceding years is to be considered. Hence, EDG has considered average of CPI for FY 2020-21 to FY 2022-23. Working of the same is provided as under:-

**Table 0-20: Calculation of CPI rate considered for Employee Cost projection**

Particulars	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25
CPI based on Industrial Workers, All India	338.69	356.06	377.62	394.42	394.42
YoY	5.02%	5.13%	6.05%	4.45%	0.00%
3-years average	5.35%	6.00%	5.89%	5.40%	5.40%

Particulars	O&M Expenses			3-Year Average	3-Year Average
	FY 2020-21	FY 2021-22	FY 2022-23		
	(a)	(b)	(c)	(d) = [(a)+(b)+(c)]/3	WPI Inflation (%)
Actual Employee Expenses	332.21	353.55	348.35	344.70	5.40%

Further, as per Regulation 52 of MYT Regulations, 2021,  $G_n$  factor is a growth factor which will be approved by Hon'ble Commission to meet the additional manpower requirement proposed during tariff filing. EDG submits that  $G_n$  factor for FY 2023-24 by considering the employee



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strength in the past few years, shows a negative growth trend. However, it is estimated that the Department will be recruiting 255 Nos. of Line Helpers in FY 2023-24, which works out to 4.19% of additional employees. Accordingly, for the purpose of projection for FY 2024-25, the Petitioner has considered the growth factor  $G_n$  as 4.19%.

Computation of employee cost for FY 2024-25 is provided as under:

**Table 0-21: Calculation of Employee cost for FY 2024-25**

Particulars	Units	Projections
		FY 2024-25
Employee Cost for (n-1)th year (A)	Rs. Cr.	422.49
Gn Factor (Y-O-Y) (B)	%	4.19%
CPI Inflation (C)	%	5.40%
<b>Employee Cost for nth year <math>D = A * (1+B) * (1+C)</math></b>	<b>Rs. Cr.</b>	<b>463.96</b>

**Repairs and Maintenance Expense:** - In line with MYT Regulations, 2021, R&M expenses for FY 2024-25 is calculated by considering FY 2023-24 as base year. It is submitted that the last available provisional annual accounts are of FY 2022-23. Accordingly, EDG has considered the provisional actual values of FY 2022-23 to compute the base year values for FY 2023-24.

As per MYT Regulations, 2021, average of preceding three years of Wholesale Price Index (WPI) has been considered for calculation of R&M expenses. Calculation of average rate of WPI of 7.90% is shown below:

**Table 0-22: Calculation of R&M Expense for FY 2024-25**

Escalation rate working	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25
<b>WPI based on Office of Economic Advisor, GoI</b>	<b>123.38</b>	<b>139.41</b>	<b>152.53</b>	<b>151.09</b>	<b>151.09</b>
YoY	1.29%	13.00%	9.41%	-0.94%	0.00%
3-years average	2.96%	2.42%	5.32%	7.90%	7.90%

Particulars	R & M Expenses			3-Year Average	3-Year Average
	FY 2020-21	FY 2021-22	FY 2022-23		
	(a)	(b)	(c)	(d) = $\frac{[(a)+(b)+(c)]}{3}$	WPI Inflation (%)
<b>Actual R&amp;M Expenses</b>	12.48	60.77	24.36	32.54	7.90%

K factor is calculated as ratio of actual R&M over GFA. The K factor considered is as under:





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R&M Expenses	FY 2020-21	FY 2021-22	FY 2022-23
R&M expenses	12.48	60.77	24.36
Opening GFA	1,398.63	1,443.85	1,566.39
K factor	0.89%	4.21%	1.56%
<b>Average of K factor (as per JERC Approved)</b>	<b>2.22%</b>		

The R&M expenses projected for FY 2024-25 as per the Regulations is Rs. 42.73 Cr. However, the R&M expenses for FY 2023-24 H1 (actual) is Rs. 33.66 Cr. So, the projection of EDG Accounts dept. and Technical dept. is considered at 85% of FY 2023-24 H1 for the FY 2023-24 H2. The estimation for FY 2023-24 arrived at Rs. 62.27 Cr. which is comparatively higher than the R&M expenses as per the Regulations. So, the R&M expenses arrived for FY 2023-24 is considered for FY 2024-25.

Accordingly, R&M expense projected for FY 2024-25, as per Regulations and considered for ARR is as under:

**Table 0-23: R&M Expense for FY 2024-25**

Particulars	Units	Projections
		FY 2024-25
GFA for nth-1 year (A)	Rs. Cr.	1,784.89
K factor (B)	%	2.22%
WPI Inflation (C)	%	7.90%
<b>R&amp;M Cost for nth year <math>D = A * B * (1 + C)</math></b>	<b>Rs. Cr.</b>	<b>42.73</b>
<b>Considered for ARR</b>	<b>Rs. Cr.</b>	<b>62.27</b>

**Administrative and General Expenses:** EDG has considered FY 2023-24 as base year. It is submitted that the last available provisional accounts are of FY 2022-23. Accordingly, EDG has considered the provisional actual values of FY 2022-23 to compute the values for base year FY 2023-24. A&G expenses for FY 2024-25 is projected based on the methodology specified in the Regulations. For FY 2023-24 (base year), A&G expenses are arrived by escalating the average (FY 2020-21 to FY 2022-23) by CPI. As per Regulations, CPI of three preceding years to be considered. Hence, EDG has considered average of CPI inflation for FY 2021-22 to FY 2023-24. Working of the same is provided as under:-

**Table 0-24: Calculation of CPI rate considered for Employee Cost projection**

Particulars	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25
<b>CPI based on Industrial Workers, All India</b>	338.69	356.06	377.62	394.42	394.42
YoY	5.02%	5.13%	6.05%	4.45%	0.00%
<b>3 years average</b>	5.35%	6.00%	5.89%	5.40%	5.40%



Accordingly, calculation of A&G expenses for FY 2024-25 is provided below:-

**Table 0-25: A&G Expense for FY 2024-25**

Particulars	Units	Projections
		FY 2024-25
A&G Cost for nth-1 year (A)	Rs. Cr.	42.30
CPI Inflation (B)	%	5.40%
<b>A&amp;G Cost for nth year [D= A*(1+B)]</b>	<b>Rs. Cr.</b>	<b>44.58</b>

Total O&M expenses projected for FY 2024-25 are as under:

**Table 0-26: O&M Expenses for FY 2024-25 (Rs. Cr.)**

S/No	Particulars	FY 2024-25	
		Approved in T.O dated 31 <sup>st</sup> March, 2022	Projected
1.	Employee Expenses	365.69	463.96
2.	A&G Expenses	38.27	44.58
3.	R&M Expenses	104.23	62.27
<b>4.</b>	<b>Total O&amp;M Expenses</b>	<b>508.20</b>	<b>570.81</b>

## Capital expenditure and Capitalisation

The MYT Regulations, 2021 specifies the following provisions for projection of capital expenditure.

### ***“8.5 Capital Investment Plan***

*a) The Capital Investment Plan to be submitted as part of Business Plan shall include details of New Projects planned during the Control Period, purpose of investment, capital structure, implementation schedule, quarter-wise capital expenditure and capitalisation schedule, financing plan, cost-benefit analysis, improvement in operational efficiency envisaged in the Control Period owing to proposed investment and such details for ongoing projects that will spill over into the Control Period under review along with justification;*

*b) The Capital Investment Plan proposed by the Transmission Licensee shall be in conformity with the plans made by the Authority/Central Transmission Utility and with the Capital Investment Plan of the Distribution Licensee;*



c) During the Annual Performance Review, the Commission shall monitor the progress of the actual capital expenditure incurred by the Licensee vis-à-vis the approved capital expenditure. The Licensees shall submit the actual capital expenditure incurred along with the annual performance review, true-up and determination of tariff filing;

d) The truing up of the capital cost incurred for the new projects and additional capital cost for the existing projects shall be done on yearly basis based on the actual capital cost incurred.:

*Provided if the actual capital cost incurred on year to year basis is lesser than the capital cost approved for determination of tariff by the Commission on the basis of the projected capital cost as on the date of commercial operation or on the basis of the projected additional capital cost, by twenty (20) percent or more, the excess tariff/revenue realized corresponding to excess capital cost as approved by the Commission, along with interest at 1.10 times of the Carrying Cost, as prevalent on the first day of April of the respective financial year, shall be adjusted from the annual revenue requirement of the respective year at the time of true-up.*

*Provided if the actual capital cost incurred on year to year basis is higher than the capital cost approved for determination of tariff by the Commission on the basis of the projected capital cost as on the date of commercial operation or on the basis of the projected additional capital cost, by twenty (20) percent or more, the shortfall in tariff/revenue realized corresponding to excess capital cost as incurred by the licensee vis-à-vis approved by the Commission, along with interest at 0.9 times of the Carrying Cost, as prevalent on the first day of April of the respective financial year, shall be allowed in the annual revenue requirement of the respective year at the time of true-up.*

e) In case the capital expenditure is required for emergency work which has not been approved in the Capital Investment Plan, the Licensee shall submit an application containing all relevant information along with reasons justifying emergency nature of the proposed work seeking approval of the Commission:

*Provided that in case capital expenditure is required for emergency work or unforeseen situation to mitigate threat to life and property and if prior intimation thereof to the Commission shall cause any irreparable loss or injury, the Licensee may undertake that capital expenditure and submit the details along with adequate justification for post facto approval of the Commission:*

*Provided further that for the purpose of Regulation 8.5(e) above, such approved capital expenditure shall be treated as a part of both the actual capital expenditure incurred by the Licensee and approved capital expenditure by the Commission;*



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*f) The Licensee shall submit a report for every quarter detailing the progress of the capital expenditure and capitalisation undertaken against that proposed in the Capital Investment Plan, on or before the last Day of the month succeeding the respective quarter for review by the Commission.”*

As per above provisions of Capital investment plan, EDG submitted the proposed plan of Capex and Capitalisation in the Business Plan petition against which the Hon’ble Commission has approved the same in the Tariff Order dated 31<sup>st</sup> March, 2022.

The Hon’ble Commission approved a total Capital Expenditure of Rs. 1,982.19 Cr. and a total Capitalisation of Rs. 2,080.76 Cr. for the 3<sup>rd</sup> MYT Control Period.

Accordingly, the summary of revised projections of Capex and Capitalisation for FY 2024-25 against approved in MYT Order is submitted in the following table:

**Table 0-27: Capital Expenditure & Capitalisation Spilled schemes up to FY 2024-25 (Rs. Cr.)**

S/No	Name of scheme	CAPITAL EXPENDITURE		CAPITALISATION	
		FY 2024-25		FY 2024-25	
		Approved in MYT Order	Revised Projection	Approved in MYT Order	Revised Projection
Existing Schemes					
A1	Schedule Tribe Development Scheme (P)	-	18.53	-	36.62
A1(A)	Schedule Caste Development Scheme	-	5.38	-	5.38
A2	Infrastructure development through Electricity Duty (Plan)	-	315.40	-	500.34
A3	Erection and Augmentation of 33/11 KV S/S line (Plan)	-	9.80	-	9.02
A4	Normal Development Schemes (Plan)	6.00	6.00	6.00	97.00
A5	System Improvement Schemes (Plan)	-	6.00		9.50
A6	Construction of staff quarters and office buildings (Plan)	-	3.52		2.00
A7	Strengthening of 220 KV Transmission Network	-	-	-	-
A8	Erection of 220/110/33/11 KV Sub-Station at Verna (New)	-	-	-	-
A9	Restructured Accelerated Power Development and Reforms Programme Part A	-	-	-	-
A10	Underground Cabling	-	-	-	-
A11	R-APDRP Part B / IPDS	-	-	-	-
A12	EHV new Transmission / Sub-Station / Capacitor banks schemes	-	-	-	-
B1	Smart grid Development of existing network	-	-	-	-



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S/No	Name of scheme	CAPITAL EXPENDITURE		CAPITALISATION	
		FY 2024-25		FY 2024-25	
		Approved in MYT Order	Revised Projection	Approved in MYT Order	Revised Projection
B2	Sub-transmission and distribution improvement scheme	-	-	-	-
	<b>Sub-Total (Existing Schemes)</b>	<b>6.00</b>	<b>364.63</b>	<b>6.00</b>	<b>659.86</b>
<b>New Schemes</b>					
<b>A</b>	<b>Projects with Administrative approval</b>	19.25	39.70	19.25	9.10
<b>B</b>	<b>Projects Approved by EFC</b>	-	37.00	-	27.00
<b>C</b>	<b>Projects tendered (To start next year)</b>	6.00	34.51	6.00	69.09
<b>D</b>	<b>REVAMPED Distribution Projects</b>	225.00	192.00	375.00	192.00
<b>E</b>	<b>Other Schemes</b>	-	384.06	-	517.08
<b>F</b>	<b>Sub-Total New Schemes</b>	<b>250.25</b>	<b>687.27</b>	<b>400.25</b>	<b>814.27</b>
<b>G</b>	<b>Existing Schemes + New Schemes</b>	<b>256.25</b>	<b>1,051.90</b>	<b>406.25</b>	<b>1,474.13</b>
<b>H</b>	<b>Schemes Implemented/ Proposed in 2023-24</b>	-	377.70	-	374.52
	<b>TOTAL</b>	<b>256.25</b>	<b>1,429.60</b>	<b>406.25</b>	<b>1,848.65</b>
<b>I</b>	<b>DEPOSIT WORKS</b>	-	-	-	-
	<b>GRAND TOTAL</b>	<b>256.25</b>	<b>1,429.60</b>	<b>406.25</b>	<b>1,848.65</b>

It is submitted that the scheme-wise details of capital expenditure and capitalization has also been provided in Format 7 and Format 10 of Tariff Filing Formats.

The financing of the Capitalization, i.e., GFA addition during the Control Period has also been projected by EDG. EDG further submits that depreciation, Interest on loan and Return on Equity is not allowed on the assets created through grants and electricity duty fund or any subsidy.

Following is the calculation of net GFA/Capitalisation after removal of grant and electricity duty portion.



**Table 0-28: Net addition to GFA for FY 2024-25**

S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Projections FY 2024-25
1	Additions to GFA	406.25	1,848.65
2	Less: 60% and 75% Grant Component of APDRP Part-B / IPDS scheme	225.25	-
3	Less: Revamped Scheme (15% Grant Prepaid Meter; 100% for DBM, billing modules etc.; 60% for SCADA)		152.90
4	Less: Schemes out of ED Fund	12.70	1,080.01
5	<b>Net Additions to GFA</b>	<b>168.30</b>	<b>615.74</b>
6	Debt (%)	70%	70%
7	Equity (%)	30%	30%
8	<b>Normative Debt addition (INR Cr)</b>	<b>117.81</b>	<b>431.02</b>
9	<b>Equity addition (INR Cr)</b>	<b>50.49</b>	<b>184.72</b>

## Depreciation

The MYT Regulations, 2021 specifies the following provisions for projection of Depreciation.

### *"31 Depreciation*

*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."*

As stated in the above Regulation and as per the MYT Formats provided by the Hon'ble Commission, EDG has computed depreciation as per new depreciation rate specified in the MYT Regulations, 2021. Further, total depreciation is calculated asset block-wise on the total GFA. However, depreciation on assets created through grants, electricity duty fund or subsidies are not allowed as per Regulations. Hence, Depreciation for the GFA excluding grant and electricity duty fund has been computed in Format 15 of the MYT Tariff formats.

In line with above, the following table shows the depreciation projected by EDG for FY 2024-25:



**Table 0-29: Depreciation for FY 2024-25 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Projections FY 2024-25
Opening Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)	1,743.67	2041.25
Add: Gross Asset Addition	168.30	1848.65
Less: Contribution from Subsidies/ Grants/ Beneficiaries' Contribution / Consumers Contribution	-	1232.91
Value of Asset eligible for depreciation	-	615.74
Add: Addition During the Year	-	615.74
Less: Decapitalisation	-	-
<b>Closing Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)</b>	<b>1,911.97</b>	<b>2,656.99</b>
Average Gross Fixed Assets (excluding Grants/ consumers Contribution etc.)	1,827.82	2,349.12
<b>Depreciation</b>	<b>69.84</b>	<b>101.95</b>
<b>Weighted Average Rate of Depreciation</b>	<b>3.82%</b>	<b>4.34%</b>

## Interest on Loan

The MYT Regulations, 2021 specifies the following provisions for projection of Interest on Loan:

### ***“29 Interest on Loan***

*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 decapitalised 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.

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."

EDG does not have any actual loan on its books, hence, normative loan has been calculated in line with above Regulations. Accordingly, the Interest rate charged for FY 2024-25 has been considered as the rate computed for FY 2023-24, which works out to be 9.50%. Further, EDG has considered the closing normative loan base for FY 2023-24 as opening normative loan base for FY 2024-25 and the normative debt addition due to asset addition for the year as discussed in the above section. Further, the normative repayment has been considered equal to the depreciation projected for FY 2024-25.

In line with above methodology, following is calculation of the normative interest on loan:

**Table 0-30: Normative Interest on Loan for FY 2024-25 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Projections FY 2024-25
Opening Normative Loan	446.27	682.45
Add: Normative Loan during the year/GFA during the year	117.81	431.02
Less: Normative Repayment for the year	69.84	101.95



Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Projections FY 2024-25
Closing Normative Loan	494.24	1011.51
Average Normative Loan	470.25	846.98
Rate of Interest	8.00%	9.50%
Interest on Normative Loan	37.26	80.46

The detailed calculation has been provided in Format 12 of Tariff Filing Formats filed along with this Petition. The Hon'ble Commission is requested to approve the interest on loan as shown in the table above.

### Return on Equity

The MYT Regulations, 2021 specifies the following provisions for projection of Return on Equity:

#### *"28 Return on Equity*

*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.*

Further, provision of debt to equity ratio specified in the MYT Regulation 2021 is as under:-

#### *"27 Debt to Equity Ratio*

*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.”

Opening equity for FY 2024-25 is taken as per closing normative equity for FY 2023-24 calculated in previous chapter, further equity addition during the year is considered as 30% of the capitalisation (excluding capitalisation through grant and electricity duty fund) in line with above specified Regulations.

The following table shows the calculation of return on equity for FY 2024-25:

**Table 0-31: Return on Equity for FY 2024-25 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Projections FY 2024-25
Opening Balance of Equity	523.70	592.62
Net Additions during the Year	50.49	184.72
Closing Balance of Equity	574.18	777.34



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Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Projections FY 2024-25
Average Equity	548.94	684.98
Average Equity (Wires Business)	494.05	616.48
Average Equity (Retail Supply Business)	54.89	68.50
Rate of Return on Equity for Wire Business (%)	15.50%	15.50%
RoE Wire Business	76.58	95.56
Rate of Return on Equity for Retail Supply Business (%)	16.00%	16.00%
RoE on Retail Supply business	8.78	10.96
<b>Total RoE (Wire and Retail Supply business)</b>	<b>85.36</b>	<b>106.51</b>

The detailed calculation has been provided in Format 16 of Tariff Filing Formats filed along with this Petition. The Hon'ble Commission is requested to approve the Return on Equity as shown in the table above.

### Interest on Security Deposit

The opening security deposit is considered from the closing balance of deposit arrived for FY 2023-24. Addition of consumer security deposit is projected as per new consumer expected to be connected in FY 2024-25. The interest rate considered is 6.75% based on the RBI Bank Rate applicable on 1<sup>st</sup> April of FY 2023-24.

The following table shows the computation of interest on security deposit for FY 2024-25:

**Table 0-32: Interest on Security Deposit for FY 2024-25 (Rs. Cr.)**

Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Projections FY 2024-25
Opening Security Deposit	108.09	225.73
Additions during the year	16.69	37.71
Less: Deposits Refunded	0.39	-
Closing Security Deposit	124.40	263.44
Average Security Deposit	116.24	244.58
Rate of Interest (%)	4.25%	6.75%
<b>Interest on Security Deposit to be paid for the Year</b>	<b>4.94</b>	<b>16.51</b>

The detailed calculation has been provided in Format 22B of Tariff Filing Formats filed along with this Petition. The Hon'ble Commission is requested to approve the interest on security deposit as shown in the table above.

### Interest on Working Capital

The MYT Regulations, 2021 specifies the following provisions for projection of Interest on



Working Capital:

**“32 Interest on Working Capital**

32.1 The norms for working capital for Transmission Licensee shall be as specified in Chapter 5 of these Regulations.

32.2 The norms for working capital for Distribution Wires Business and Retail Supply Business shall be as specified in Chapter 6 and Chapter 7 of these Regulations respectively.

32.3 The interest on working capital shall be payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures.

32.4 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 1<sup>st</sup> April of the Financial Year in which the Petition is filed plus 200 basis points.”

In line with above provisions specified in MYT Regulations, 2021, EDG has calculated the working capital requirement. As on 1<sup>st</sup> April 2023, MCLR rate is at 8.50%. Hence, Interest rate of 10.50% (MCLR plus 200 basis points) is considered to calculate the Interest on working capital loan for FY 2024-25.

Further, IWC for wire and supply business has been computed based on the allocation provided in the Regulations.

Following tables shows the Interest on working capital loan for FY 2024-25:

**Table 0-33: Working Capital Interest for Wheeling Business for FY 2024-25 (Rs. Cr.)**

For Wheeling Business		
S/No	Particulars	Projections
		FY 2024-25
<b>A.</b>	O&M Expenses for Wire Business	
<b>i)</b>	<i>R&amp;M Expenses</i>	56.05
<b>ii)</b>	<i>A&amp;G Expenses</i>	22.29
<b>iii)</b>	<i>Employee Cost</i>	185.58
	Total O&M Expenses	263.92
	O&M Expenses for wire business for 1 month	21.99
<b>B.</b>	Maintenance Spares (@ 40% of R&M Expenses)	1.87
<b>C.</b>	Receivables equivalent to two (2) month of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs.	62.51
<b>D.</b>	Less: Amount, if any, held as security deposits from Distribution System Users	24.46
<b>E.</b>	Total Working Capital (A (v)+B+C-D)	61.91



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For Wheeling Business		
S/No	Particulars	Projections
		FY 2024-25
F.	Rate of Interest	10.50%
G.	Interest on Working Capital (Wheeling Business)	6.50

Table 0-34: Working Capital Interest for Retail Supply Business for FY 2024-25 (Rs. Cr.)

For Retail Supply Business		
S/No	Particulars	Projections
		FY 2024-25
A.	O&M Expenses for Retail Supply Business	
i)	R&M Expenses	6.23
ii)	A&G Expenses	22.29
iii)	Employee Cost	278.38
	Total O&M Expenses	306.89
	O&M Expenses for wire business for 1 month	25.57
B.	Maintenance Spares (@40% of R&M Expenses for Retail Supply Business)	0.21
C.	Receivables equivalent to 2 months of average of total revenue from sale of energy, approved by Commission in the ARR	407.28
D.	Less: Consumer Security Deposit	
E.	Less: One month of power procurement cost	220.13
		185.33
F.	Total Working Capital (A (v)+B+C-D-E)	27.42
G.	Rate of Interest	10.50%
H.	Interest on Working Capital (Retail Supply Business)	2.88

Table 0-35: Interest on working capital for FY 2024-25 (Rs. Cr.)

Particulars	Projections
	FY 2024-25
For Wheeling Business	6.50
For Retail Supply Business	2.88
<b>Total Interest on Working Capital</b>	<b>9.38</b>

The Hon'ble Commission is requested to approve the interest on working capital shown in the



tables above as per MYT Regulations, 2021.

### Non-Tariff Income

The MYT Regulations, 2021 specifies the following provisions for Non-Tariff Income:

*“54 Non-Tariff Income*

*54.1 The amount of Non-Tariff Income relating to the Distribution Wires Business as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in determining the wheeling charges of Distribution Wires Business of 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 wheeling charges.*

*54.2 The Non-Tariff Income shall inter-alia include:*

- a) Income from rent of land or buildings;*
- b) Income from sale of scrap in excess of 10% of the salvage value;*
- c) Income from statutory investments;*
- d) Income from interest on contingency reserve investment;*
- e) Interest on advances to suppliers/contractors;*
- f) Rental from staff quarters;*
- g) Rental from contractors;*
- h) Income from hire charges from contractors and others;*
- i) Income from advertisements, etc.;*
- j) Miscellaneous receipts;*
- k) Excess found on physical verification;*
- l) Deferred Income from grant, subsidy, etc., as per Annual Accounts;*
- m) Prior period income, etc.:*

*Provided that the interest/dividend earned from investments made out of Return on Equity corresponding to the Distribution Wires Business of the Distribution Licensee shall not be included in Non-Tariff Income.”*

For FY 2024-25, the Non-Tariff income has been projected based upon the actual and estimated





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values of FY 2023-24. As EDG pays the bills upfront or promptly to avail the rebates, the anticipated rebate from the generators has been considered as per the actual based on FY 2023-24 H1 figures and the miscellaneous receipts considered proportionately with the estimated figures of FY 2023-24.

The following table shows the Non-tariff Income as projected by EDG:

**Table 0-36: Non-Tariff Income for FY 2024-25 (Rs. Crore)**

S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Projections FY 2024-25
1.	Meter/metering equipment/service line rentals	-	-
2.	Service Charges	-	-
3.	Customer Charges	-	-
4.	Revenue from Late Payment Surcharge	-	-
5.	Miscellaneous Charges	-	-
6.	Anticipated Rebates from Generators	-	28.36
7.	Miscellaneous Receipts	-	23.70
8.	Interest on advances to suppliers/contractors	-	-
9.	Interest on Staff Loans and Advances	-	-
10.	Income from Trading	-	-
11.	Income from Staff Welfare Activities	-	-
12.	Excess found on Physical Verification	-	-
13.	Interest on Investments, Fixed and Call Deposits and Bank Balances	-	-
14.	Prior Period Income	-	-
15.	Income from Open Access Charges (Application fee, Cross Subsidy Surcharge, Additional Surcharge, Transmission and/or Wheeling Charges, Scheduling Charges etc.	-	-
16.	Sale Proceeds of dead stock, waste paper etc.	-	-
17.	Any other Income not included above	-	-
	<b>Total</b>	<b>26.32</b>	<b>52.06</b>

EDG request Hon'ble Commission to approve above mentioned Non-Tariff income for FY 2024-25.

**Aggregate Revenue Requirement for FY 2024-25**

The Aggregate Revenue Requirement derived for FY 2024-25 based on the expenses discussed in the previous sections is shown in the table below.



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**Table 0-37: Aggregate Revenue Requirement for FY 2024-25 (Rs. Cr.)**

S/No	Particulars	Approved in T.O dated 31 <sup>st</sup> March, 2022	Projections FY 2024-25
<b>A</b>	<b>Expenditure</b>		
1.	Cost of Power Purchase from own Generating Stations	-	-
2.	Cost of Power Purchase from other Generating Stations	2,000.48	2,223.96
3.	Inter State Transmission Charges	-	-
4.	Intra State Transmission Charges	-	-
5.	SLDC Fees & Charges	-	-
6.	O&M Expenses (Gross)	508.20	570.81
	a) R&M Expenses	104.23	62.27
	b) Employee Cost	365.69	463.96
	c) A&G Expenses	38.27	44.58
7.	Depreciation	69.84	101.95
8.	Interest and Finance Charges	37.62	80.46
9.	Interest on Working Capital	19.15	9.38
10.	Prior Period Expenses	-	-
11.	Interest on Consumer Security Deposit	4.94	16.51
12.	Extraordinary Items	-	-
13.	Bad and Doubtful Debts	-	-
14.	Other Debts and Write-offs	-	-
15.	Statutory Levies and Taxes, if any	-	-
16.	Less: Expenses Capitalised	-	-
	a) Interest Charges Capitalized	-	-
	b) R&M Expenses Capitalized	-	-
	c) A&G Expenses Capitalized	-	-
	d) Employee Cost Capitalized	-	-
	<b>Sub Total (a+b+c+d)</b>	-	-
	<b>Sub Total Expenditure (1 to 15-16)</b>	2,640.23	3,003.08
<b>B</b>	Return on Equity	85.36	106.51
<b>C</b>	Less: Non-Tariff and other Income	26.32	52.06
<b>D</b>	Less: Any Grant/ Subventions, other subsidy provided by the Government	-	-
<b>E</b>	<b>Annual Revenue Requirement (A+B-C-D)</b>	<b>2,699.27</b>	<b>3,057.54</b>

EDG requests the Hon'ble Commission to approve Aggregate Revenue requirement of Rs. 3,057.54 Cr for FY 2024-25.

### Revenue from Sale of Power at Existing Tariff

The Revenue from sale of power at existing tariff rates (approved by Hon'ble Commission for FY 2023-24) estimated by EDG for FY 2024-25 is outlined below. The detailed computation has been provided in Format F23 of the MYT Tariff Formats.



Table 0-38: Revenue from Sale of Power at existing Tariff from FY 2024-25 (Rs. Cr.)

S/No	Category	Revenue for FY 2023-24 from approved retail tariff determined by Commission in T.O dated 30 <sup>th</sup> March, 2023					Revenue for FY 2024-25 from existing retail tariff determined by Commission (In INR Cr) for FY 2023-24				
		Full year revenue (Rs. Cr.)				Average Billing Rate (Rs./kWh)	Full year revenue (Rs. Cr.)				Average Billing Rate (Rs./kWh)
		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total	
<b>1</b>	<b>Domestic</b>	<b>1,469.35</b>	<b>46.46</b>	<b>427.36</b>	<b>473.82</b>	<b>3.22</b>	<b>1,455.58</b>	<b>47.86</b>	<b>426.24</b>	<b>474.09</b>	<b>3.26</b>
(i)	LT-D Domestic	1,468.06	46.41	427.18	473.59	3.23	1454.18	47.79	426.06	473.85	3.26
	0-100 units	564.39	14.17	98.77	112.94	2.00	551.62	15.43	96.53	111.97	2.03
	101-200 units	358.16	10.22	93.12	103.34	2.89	352.29	11.77	91.59	103.36	2.93
	201-300 units	196.18	8.02	64.74	72.76	3.71	194.77	8.33	64.27	72.60	3.73
	301-400 units	108.71	4.80	47.83	52.63	4.84	109.32	4.53	48.10	52.63	4.81
	Above 400 units	240.62	9.21	122.72	131.93	5.48	246.19	7.73	125.56	133.28	5.41
(ii)	Low Income Group	0.93	0.00	0.00	0.00	0.02	0.99	0.00	0.00	0.00	0.02
(iii)	HT-D Domestic	0.37	0.05	0.18	0.22	6.16	0.41	0.07	0.18	0.24	5.92
<b>2</b>	<b>Commercial</b>	<b>629.00</b>	<b>53.86</b>	<b>314.43</b>	<b>368.29</b>	<b>5.86</b>	<b>786.25</b>	<b>70.70</b>	<b>375.48</b>	<b>446.18</b>	<b>5.86</b>
(i)	LT-C Commercial	474.02	27.82	230.12	257.94	5.44	570.49	29.80	267.15	296.95	5.44
	0-100 units	85.71	7.67	30.86	38.53	4.5	91.46	8.50	31.49	39.99	4.57
	101-200 units	51.37	2.44	22.60	25.04	4.87	58.16	2.85	24.47	27.33	4.91
	201-400 units	63.77	3.12	31.88	35	5.49	74.91	3.46	35.82	39.28	5.48
	Above 400 units	273.16	14.59	144.78	159.37	5.83	345.97	14.98	175.36	190.35	5.75
(ii)	HT-C Commercial	154.98	26.04	84.31	110.35	7.12	215.76	40.90	108.33	149.23	6.92
<b>3</b>	<b>Industrial</b>	<b>2,341.91</b>	<b>215.74</b>	<b>1,178.91</b>	<b>1,394.66</b>	<b>5.96</b>	<b>2,593.50</b>	<b>246.13</b>	<b>1180.97</b>	<b>1427.10</b>	<b>5.50</b>
(i)	LT-I Industrial	86.77	9.48	35.78	45.26	5.22	94.18	9.79	39.76	49.55	5.15
	0-500 units	16.91	4.38	6.09	10.46	6.19	17.04	4.40	6.27	10.66	6.13
	Above 500 units	69.86	5.11	29.69	34.8	4.98	77.14	5.39	33.50	38.89	4.93
(ii)	Low Tension-Mixed/LT-P (Hotel Industries)	3.90	0.16	2.19	2.35	6.02	3.39	0.18	1.82	2.00	6.17



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S/No	Category	Revenue for FY 2023-24 from approved retail tariff determined by Commission in T.O dated 30 <sup>th</sup> March, 2023					Revenue for FY 2024-25 from existing retail tariff determined by Commission (In INR Cr) for FY 2023-24				
		Full year revenue (Rs. Cr.)				Average Billing Rate (Rs./kWh)	Full year revenue (Rs. Cr.)				Average Billing Rate (Rs./kWh)
		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total	
(iii)	High Tension-I/HT-I	1,756.68	171.97	894.92	1,066.89	6.07	1,908.48	197.98	833.82	1031.80	5.41
	Connected at 11/33 kV	1,467.02	147.13	752.32	899.45	6.13	1,574.96	173.17	669.37	842.54	5.35
	Connected at 110 kV	289.66	24.84	142.60	167.44	5.78	333.52	24.81	164.45	189.27	5.67
(iv)	High Tension-Ferro/SM/PI/SR	494.55	34.13	246.02	280.15	5.66	587.45	38.18	305.56	343.74	5.85
4	<b>Agriculture</b>	<b>35.47</b>	<b>1.35</b>	<b>6.64</b>	<b>7.99</b>	<b>2.25</b>	<b>43.64</b>	<b>2.20</b>	<b>7.46</b>	<b>9.66</b>	<b>2.21</b>
(i)	Low Tension-AG/LT-AGP (Pump Sets/Irrigation)	14.22	0.81	2.13	2.94	2.07	19.37	1.11	2.91	4.01	2.07
(ii)	Low Tension-AG/LT-AGA (Allied Activities)	0.65	0.04	0.11	0.15	2.35	1.57	0.08	0.28	0.36	2.26
(iii)	High Tension-AG/HT-AGP (Pump Sets/Irrigation)	6.48	0.39	1.62	2.01	3.11	6.26	0.75	1.01	1.76	2.82
(iv)	High Tension-AG/HT-AG (Allied Activities)	14.12	0.11	2.77	2.88	2.04	16.44	0.27	3.27	3.53	2.15
5	<b>Military Engineering Services/ Defence Establishments</b>	<b>33.55</b>	<b>1.81</b>	<b>17.46</b>	<b>19.28</b>	<b>5.75</b>	<b>36.45</b>	<b>2.59</b>	<b>8.97</b>	<b>11.57</b>	<b>3.17</b>
6	<b>Public Lighting</b>	<b>46.27</b>	<b>1.16</b>	<b>26.14</b>	<b>27.3</b>	<b>5.90</b>	<b>55.14</b>	<b>1.41</b>	<b>31.15</b>	<b>32.57</b>	<b>5.91</b>
7	<b>Hoardings/Signboards</b>	<b>0.27</b>	<b>0.04</b>	<b>0.27</b>	<b>0.3</b>	<b>11.37</b>	<b>0.16</b>	<b>0.06</b>	<b>0.16</b>	<b>0.22</b>	<b>13.39</b>
8	<b>Temporary</b>	<b>8.80</b>	<b>0.00</b>	<b>7.95</b>	<b>7.95</b>	<b>9.03</b>	<b>36.98</b>	<b>3.35</b>	<b>20.13</b>	<b>23.47</b>	<b>6.35</b>
(i)	LT	3.60	0.00	3.06	3.06	8.50	31.36	1.80	15.90	17.70	5.64
	LT Domestic	0.25	0.00	0.12	0.12	4.84	3.74	0.17	0.98	1.15	3.08
	LT Commercial	3.35	0.00	2.94	2.94	8.78	27.62	1.63	14.91	16.54	5.99



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S/No	Category	Revenue for FY 2023-24 from approved retail tariff determined by Commission in T.O dated 30 <sup>th</sup> March, 2023					Revenue for FY 2024-25 from existing retail tariff determined by Commission (In INR Cr) for FY 2023-24				
		Full year revenue (Rs. Cr.)				Average Billing Rate (Rs./kWh)	Full year revenue (Rs. Cr.)				Average Billing Rate (Rs./kWh)
		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total	
(ii)	HT	5.20	0.00	4.89	4.89	9.4	5.62	1.55	4.23	5.78	10.28
<b>9</b>	<b>Single Point Supply</b>	<b>5.38</b>	<b>0.64</b>	<b>2.92</b>	<b>3.55</b>	<b>6.6</b>	<b>7.00</b>	<b>0.75</b>	<b>3.47</b>	<b>4.22</b>	<b>6.02</b>
(i)	<i>Residential Complexes</i>	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
(ii)	<i>Commercial Complexes</i>	5.38	0.64	2.92	3.55	6.60	7.00	0.75	3.47	4.22	6.02
(iii)	<i>Industrial Complexes</i>	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
<b>10</b>	<b>Other Categories</b>	-	-	-	-	-	<b>7.04</b>	<b>0.00</b>	<b>13.51</b>	<b>13.51</b>	<b>4.50</b>
(i)	<i>EV Charging Stations</i>	0.00	0.00	0.00	0.00	-	7.04	0.00	13.51	13.51	4.50
	<b>TOTAL</b>	<b>4,570.01</b>	<b>321.06</b>	<b>1,982.09</b>	<b>2,303.14</b>	<b>5.04</b>	<b>5,021.76</b>	<b>375.05</b>	<b>2,067.54</b>	<b>2,442.60</b>	<b>4.86</b>



Based on the Aggregate Revenue Requirement and revenue calculation based on the existing tariff, the Revenue Gap/ (Surplus) for FY 2024-25 has been computed as shown in the table below:

**Table 0-39: Revenue Gap at existing Tariff for FY 2024-25 (Rs. Cr.)**

Particulars	FY 2024-25
Net Revenue Requirement	3,057.54
Revenue from Sale of Power	2,442.60
<b>Revenue Gap during the Year</b>	<b>614.94</b>

Further, EDG submits that, to address the Revenue Gap, EDG has a proposed tariff hike for consumers falling under the LT Category. Further, EDG faces a substantial increase in peak demand and is facing issues to meet the demand during 6.00 PM to 11.00 PM from various consumers, especially HT and industrial consumers. Hence, in order to shift the concentration of the Peak Demand to other time slabs, EDG has proposed to increase in the Tariff Time of Day (ToD) Tariff during the Evening Peak Load Period (6:00 PM to 11:00 PM), with an increase from the current 120% to 140% of the normal rate of energy charge, applicable to consumers falling under the HT/EHT Category. This change is TOD tariff rate, some additional revenue will be generated for EDG apart from the tariff hike proposed. The remaining portion of the Revenue Gap is envisaged to be covered through budgetary support of Government of Goa.



## 5 TARIFF PHILOSOPHY

### Preamble

This Chapter elucidates the proposed retail tariff and miscellaneous charges to be applicable for FY 2024-25. EDG prays to the Hon'ble Commission to approve the proposed retail tariff for FY 2024-25 for Consumers of LT Category, which is to be applicable from 1<sup>st</sup> April, 2024.

### Tariff Design Principles

Over the years, Hon'ble Commission has been guided by the Electricity Act, 2003 and the National Tariff Policy while determining retail tariffs across the State of Goa. The Hon'ble Commission has always laid emphasis on adoption of factors that encourages economy, efficiency, effective performance and improved conditions of supply. On these lines, the Hon'ble Commission, in this Order too, may apply similar principles keeping in view the ground realities.

### Philosophy of Tariff Design

EDG submits that gap of FY 2024-25 is proposed to be bridged partially through tariff hike on the Consumers of LT Category, increase in the Tariff Slab for the Evening Peak Load Period (6:00 PM to 11:00 PM) from 120% to 140% of normal rate of energy charge (for HT/EHT Category of Consumers) and remaining through budgetary support.

Financial Accounts for FY 2022-23 have been completed and submitted to CAG for audit purposes. The CAG audit is in process, upon finalisation, the CAG Audit certificate will be submitted separately before the Hon'ble JERC. In the interim, an Acknowledgement certificate on behalf of the CAG team has been submitted in **Annexure-4** in order to affirm the audit practice.

EDG submits that Konkan Railway Corporation Limited (KRCL) requested the Hon'ble JERC and the EDG in the Public Hearing to introduce a separate tariff category for Railway Traction. Currently, KRCL is billed under HT Commercial category at 220 kV voltage level. Considering KRCL's request, EDG conducted an analysis which indicates that in other States, i.e. Maharashtra (Rs. 7.53/kWh) and Karnataka (Rs. 7.00/kWh) there is a separate tariff rate for Railway Traction and the energy charge is on higher side compared to the tariff rate for Commercial category in Goa (Existing Tariff Rs. 5.25/kVAh). Hence, EDG requests the Hon'ble Commission to introduce a new tariff category or a new slab (in commercial) as "Railway Traction" for the current 2 consumers (and any future consumer that might come up in state), currently billed under HT Category (EDG having the Commercial Tariff as the highest tariff), for the Railway consumers at the same tariff of HT Commercial. The details of the Railway consumers are provided in the **Annexure-8**.



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Further, the Revenue Gap may be provisionally recognized by the Hon'ble Commission and due treatment be given for recovery at a later date when petition for true-ups are filed based on actual accounts / figures of Revenue Gap. However, Revenue Gap on account of True-ups of FY 2022-23 will not be passed on to the Consumers of EDG on account of Budgetary Support letters issued by Government of Goa from time to time.

For FY 2024-25, the Government of Goa has decided to increase the tariff for the consumers as mentioned above. Accordingly, to partially bridge the huge revenue gap and to avoid the tariff shock to consumers, EDG proposes increase in current Tariff.

As stated above, EDG proposes the retail tariff for FY 2024-25 and the same is tabulated below:





**Table 5-1: Proposed Tariff Structure for FY 2024-25**

S/No	Category	Tariff approved by JERC in T.O. dated 30 <sup>th</sup> March 2023 w.e.f. 01 <sup>st</sup> April 2023			Proposed Tariff for FY 2024-25		
		Fixed Charges	Energy Charges		Fixed Charges	Energy Charges	
			Units	Rate		Units	Rate
1.	Domestic						
A	Low Tension-D/LT-D						
	0-100 units	INR 20/kW/Month or part thereof	Rs./kWh	1.75	INR 20/kW/Month or part thereof	Rs./kWh	1.88
	101-200 units		Rs./kWh	2.60		Rs./kWh	2.79
	201 to 300 units		Rs./kWh	3.30		Rs./kWh	3.70
	301 to 400 units		Rs./kWh	4.40		Rs./kWh	4.90
	Above 400 units		Rs./kWh	5.10		Rs./kWh	5.80
B	Low Tension-LIG/LT-LIG						
	Consumption up to 50 Units/Month	INR 20/kW/Month or part thereof	Rs./kWh	-	INR 20/kW/Month or part thereof	Rs./kWh	-
C	High Tension-D/HT-D						
	All Units	INR 110/kVA/Month or part thereof	Rs./kVAh	4.60	INR 110/kVA/Month or part thereof	Rs./kVAh	4.60
2.	Commercial						
A	Low Tension-C/LT-C						
	0-100 units	For consumers with Load up to 20 kW INR 45/kW/Month or part thereof	Rs./kWh	3.60	For consumers with Load up to 20 kW INR 45/kW/Month or part thereof	Rs./kWh	3.97
	101-200 units		Rs./kWh	4.40		Rs./kWh	4.80
	201 units- 400 units		Rs./kWh	5.00		Rs./kWh	5.56
	Above 400 units	For consumers with Load more than 20 kW and up to 90 kW INR 70/kW/Month or part thereof	Rs./kWh	5.30	For consumers with Load more than 20 kW and up to 90 kW INR 70/kW/Month or part thereof	Rs./kWh	6.00
B	High Tension-C/HT-C						
	All Units	INR 250/kVA/month or part thereof	Rs./kVAh	5.25	INR 250/kVA/month or part thereof	Rs./kVAh	5.25



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S/No	Category	Tariff approved by JERC in T.O. dated 30 <sup>th</sup> March 2023 w.e.f. 01 <sup>st</sup> April 2023			Proposed Tariff for FY 2024-25		
		Fixed Charges	Energy Charges		Fixed Charges	Energy Charges	
			Units	Rate		Units	Rate
3.	Industrial						
A	Low Tension-I/LT-I						
	0-500 units	INR 50/HP/Month or part thereof	Rs./kWh	3.60	INR 50/HP/Month or part thereof	Rs./kWh	3.98
	Above 500 units	INR 50/HP/Month or part thereof	Rs./kWh	4.25	INR 50/HP/Month or part thereof	Rs./kWh	4.65
B	Low Tension-Mixed/LT-P (Hotel Industries)						
	All Units	INR 60/kW/Month or part thereof	Rs./kWh	5.60	INR 60/kW/Month or part thereof	Rs./kWh	6.00
C	High Tension-I/HT-I						
	Connected at 11/33 kV	INR 275/kVA/Month or part thereof	Rs./kVAh	4.95	INR 275/kVA/Month or part thereof	Rs./kVAh	4.95
	Connected at 110 kV	INR 275/kVA/Month or part thereof	Rs./kVAh	4.90	INR 275/kVA/Month or part thereof	Rs./kVAh	4.90
D	High Tension- Ferro/SM/ PI/ SR						
	All Units	INR 275/kVA/Month or part thereof	Rs./kVAh	4.95	INR 275/kVA/Month or part thereof	Rs./kVAh	4.95
4.	Agricultural						
A	Low Tension-AG/LT-AGP (Pump Sets/Irrigation)						
	All Units	INR 18/HP/Month or part thereof	Rs./kWh	1.50	INR 18/HP/Month or part thereof	Rs./kWh	1.55
B	Low Tension-AG/LT-AGA (Allied Activities)						
	All Units	INR 25/HP/Month or part thereof	Rs./kWh	1.75	INR 25/HP/Month or part thereof	Rs./kWh	1.85
C	High Tension-AG/HT-AGP (Pump Sets/Irrigation)						
	All Units	INR 40/kVA/Month or part thereof	Rs./kVAh	1.60	INR 40/kVA/Month or part thereof	Rs./kVAh	1.60
D	High Tension-AG/HT-AG (Allied Activities)						
	All Units	INR 70/kVA/Month or part thereof	Rs./kVAh	1.95	INR 70/kVA/Month or part thereof	Rs./kVAh	1.95



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S/No	Category	Tariff approved by JERC in T.O. dated 30 <sup>th</sup> March 2023 w.e.f. 01 <sup>st</sup> April 2023			Proposed Tariff for FY 2024-25		
		Fixed Charges	Energy Charges		Fixed Charges	Energy Charges	
			Units	Rate		Units	Rate
5.	Military Engineering Services/ Defense Establishments						
	All Units	INR 220/kVA/Month or part thereof	Rs./kVAh	5.10	INR 220/kVA/Month or part thereof	Rs./kVAh	5.10
6.	Public Lighting						
	All Units	INR 75/kW/Month or part thereof	Rs./kWh	5.65	INR 75/kW/Month or part thereof	Rs./kWh	6.00
7.	Hoardings/Signboards						
	All Units	INR 70/kVA/Month or part thereof	Rs./kWh	10.00	INR 70/kVA/Month or part thereof	Rs./kWh	11.15
8.	Temporary Supply						
A	LT Temporary Domestic	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.		
B	LT Temporary Commercial						
C	HT Temporary						
9.	Single Point Supply						
A	Residential Complexes	INR 110 per kVA per month or part thereof	Rs./kVAh	4.60	INR 110 per kVA per month or part thereof	Rs./kVAh	4.60
B	Commercial Complexes	INR 250 per kVA per month or part thereof	Rs./kVAh	5.25	INR 250 per kVA per month or part thereof	Rs./kVAh	5.25
C	Industrial Complexes	INR 275 per kVA per month or part thereof	Rs./kVAh	4.95	INR 275 per kVA per month or part thereof	Rs./kVAh	4.95
10.	Electric Vehicle Charging Station						
	All Units	-	Rs./kVAh	4.50*	-	Rs./kVAh	4.60*

\*This tariff is applicable only for supply at HT. In case of LT supply, tariff will be INR 0.20/kVAh higher than the above tariff.



## **General Conditions and Definitions**

- The tariffs are exclusive of electricity duty and taxes 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.
- Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.
- Unless specifically stated to the contrary the figures of energy charges relate to rupee per unit (kWh) charge for energy consumed and fixed charge relates to a month.
- If the 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 a higher tariff is applicable, it shall be deemed as unauthorized use of electricity and shall be assessed under the provisions of section 126 of the Electricity Act, 2003 and Supply Code Regulation notified by the JERC.
- Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. These shall be double in case bi-monthly billing is carried out and shall be proportionately calculated as per the number of days of billing, Similarly slabs of energy consumption shall also be considered accordingly in case of bi-monthly or periodic billing.
- The consumption for factory lighting/pump house lighting shall be billed as per respective main tariff category. A separate energy meter for recording energy consumed towards factory lighting for new installation need not be provided. For the existing installations, till the factory lighting meter's mains are shifted to main meter, the total energy consumption shall be arrived at by adding the energy consumption of the main energy meter and the factory lighting meter.
- The conditions, definitions etc. shall be applicable as per the Electricity Act 2003 and various JERC Regulations, such as Standards of Performance, Supply Code, Conditions of Supply, Distribution Code etc., issued from time to time.
- Billing of Demand in excess of Contracted Demand

The billing shall be on the maximum demand recorded during the month or 85% of 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 energy rate.

The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulations notified by JERC. If such over-drawal is more than 20% of the contracted 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 units, then the consumption corresponding to the contract demand will be 10,000 units ( $12000 \times 100 / 120$ ) and consumption corresponding to the excess demand will be 2000 units. This excess demand of 20 kVA and excess consumption of 2000 units will be billed at twice the respective normal rate.

- The adjustment because of Fuel and Power Purchase Cost variation shall be calculated in accordance with the FPPCA formula separately notified by the Commission under the Regulation. Such charges shall be recovered / refunded in accordance with the terms and conditions specified in the FPPCA formula.
- The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in the Tariff Order.
- For staff quarters, rest/guest houses, street lighting in the colony of a factory which is situated separately from the main factory and for distribution lines, service lines, etc. permitted to be owned and maintained by the HT consumer owning the factory, there shall be a separate connection and such energy consumed shall be charged under Single Point Supply.
- Advance Payment Rebate: If payment is made in advance well before commencement of the consumption period for which the bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit, taxes and duties) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
- If payment is made in advance along with prior declaration of premises to be closed for a certain period of time, a rebate of 1% per month shall be given on the amount (excluding security deposit, taxes and duties) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
- Prompt Payment Rebate: If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount (excluding taxes and duties) shall be given in case of cash payment and . Those consumers having arrears shall not be entitled for such rebate and the amount paid will first be used to set off past liabilities.
- 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.
- Delayed Payment Charges (DPC): In case the electricity bills are not paid within the due date mentioned on the bill, delayed payment charges of 1.5% (computed on a daily basis on the outstanding bill from the due date till the date of payment) shall be levied on the bill amount. However, if a consumer makes part payment of a bill (in exceptional circumstances, with prior



approval of the Chief Electrical Engineer), within the due date, then the delayed payment charges shall be applicable only on the amount which was not paid within the due date.

- Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paise shall be ignored and amount of 50 paise or more shall be rounded off to the next rupee.
- If the consumer fails to pay the energy bill presented to him by the due date the department shall have the right to disconnect the supply as per provision of the Electricity Act 2003 and Supply Code Regulations notified by JERC as amended from time to time.
- In case of non-realization of payment through Cheque, a penalty of 5% of the cheque amount in addition to the Delayed Payment Charges (DPC) will be levied on the consumers
- Time of Day Tariff (ToD ):
  - 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.
  - The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

**Applicability of ToD Tariff**

Time of use	Demand Charges	Energy Charges
Normal period (7:00 a.m. to 6:00 p.m)	Normal Rate	Normal rate of energy charges
Evening peak load period (6:00 p.m to 11.00 p.m)	Normal Rate	120% of normal rate of energy charges
Off-peak load period (11:00 p.m to 7:00 a.m)	Normal Rate	90% of normal rate of energy charges

- Applicability and Terms and Conditions of TOD tariff:
  - TOD tariff is mandatory for HT/EHT consumers and shall be optional for LT industrial and commercial consumers
  - The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from sources other than ED-Goa through wheeling of power.
  - The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff
  - In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.



## Schedule of Miscellaneous Charges

There is no change proposed in the schedule of Miscellaneous charges for FY 2024-25 and the same are proposed to be retained as approved by the Hon'ble Commission vide its order dated 30<sup>th</sup> March 2023.

**Table 5-2: Schedule of Miscellaneous Charges**

Description	Miscellaneous Charges
<b>Reconnection Charges (As per provisions of (Electricity Supply Code) Regulations 2018)</b>	
<b>LT Services – At Cut outs</b>	
Single Phase	Rs. 25/-
Three Phase	Rs. 50/-
<b>LT Services – At Overhead Mains</b>	
Single Phase	Rs. 30/-
Three Phase	Rs. 50/-
<b>LT Services – At Underground Mains</b>	
Single Phase	Rs. 75/-
Three Phase	Rs. 125/-
<b>HT Services</b>	Rs. 200/-
<i>Note: If the same consumer seeks reconnection within 12 months from the date of reconnection or disconnection, 50% will be added to above charges</i>	
<b>Re-Rating of Installations</b>	
Lighting Installation	Rs. 50/-
Motive Power Installation	Rs. 100/-
HT	Rs. 500/-
<b>Testing Fee for Various Metering Equipment (As per provisions (Electricity Supply Code) Regulations 2018)</b>	
Single phase LT	Rs. 25/energy meter
Poly Phase LT without CT	Rs. 50/energy meter
L.T. meter with CTs/Demand or Special Type Meters	Rs. 150/energy meter
H.T and E.H.T. metering equipment	Rs. 10,000/- at site
Transformer Oil	Rs. 200/- per sample
LT Current Transformer at lab	Rs.50/- per Sample
Three Phase Tri-vector Meter Industrial LT Consumer	Rs. 1,000/- for laboratory testing
Three Phase Tri-vector Meter 11 KV and 33kV HT Consumer	Rs. 5,000/- at site



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Description	Miscellaneous Charges
Three Phase Tri-Vector Meter 110 KV EHT Consumers	Rs. 1,000/-at site
Combined CTPT Unit for 11kv and 33kv Consumer	Rs. 2,500/-
110 KV CT / PT Unit	Rs. 10,000/-
Single Phase CT	Rs. 150/ unit
Three Phase TT Block	Rs. 500/unit
Distribution Transformer Testing (HT consumer)	Rs. 6,000
Power Transformer Testing (EHT consumer)	Rs. 20,000
<b>Service Connection Charges (As per provisions of (Electricity Supply Code) Regulations 2018)</b>	
Single Phase 1 $\phi$	Rs. 250
Three Phase 3 $\phi$	
Up to 5 HP	Rs. 500
5 HP to 20 HP	Rs. 800
Above 20 HP	Rs. 1,200
HT (First 500 KVA)	Rs. 10,000
HT (Beyond 500 KVA)	Rs. 20,000
HT Additional load	Rs.500/- for every addition of 100 KVA
Extra Length for 1 $\phi$ (beyond 30 meters)	Rs. 50 /meter
Extra Length for 1 $\phi$ for agricultural consumers (beyond 300 meters)	Rs. 25 /meter
Extra Length for 3 $\phi$ (beyond 30 meters)	Rs. 100 /meter
Extra Length for 3 $\phi$ for agricultural consumers (beyond 300 meters)	Rs. 50 /meter
Underground Service Cable	Actual charges +15%
Shunt Capacitor- 20 kW to 50 kW	Rs. 2,000
Shunt Capacitor- above 50kW	Rs. 5,000
<b>Testing Consumer's installation (As per provisions of (Electricity Supply Code) Regulations 2018)</b>	
For first test of the new installation on or off an extension to an existing installation if the installation is found to be defective.	NIL
<b>For Subsequent test of the new installation or of an existing installation if the installation is found to be defective</b>	
Single phase LT	Rs. 100/-
Three phase	Rs. 200/-





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Description	Miscellaneous Charges
MS/BS loads upto 70kW	Rs. 4,000 + GST
LS/BS/RT (loads Above 70kW)	Rs. 8,000 + GST
Shunt Capacitor- 20 kW to 50 kW	Rs. 1,000 + GST
Shunt Capacitor- above 50kW	Rs. 4,000 + GST
<b>Changing the Meter or its position in the same premises at the request of the consumer when no additional material is required (As per provisions of (Electricity Supply Code) Regulations 2018)</b>	
Single phase	Rs. 100/-
3-phase without C.Ts	Rs. 200/-
L.T. meter with C.T.s	Rs. 500/-
H.T and E.H.T. metering equipment	Rs. 8000 + GST
<b>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</b>	
Meter cupboard / Meter Cubical / Box	Rs. 50/-
Where cut-out is independently sealed	Rs. 50/-
Meter cover or Meter Terminal cover	Rs. 50/-
Meter cover of Meter Terminal cover (3 phase).	Rs. 50/-
Maximum demand Indicator or C.T.s chamber	Rs. 50/-
<b>Service Charges</b>	
General Supply	
• Single Phase	Rs. 10/-
• Three phase below 70kW	Rs. 20/-
• Three phase above 70kW	Rs. 50/-
Industrial/bulk/ agriculture /Street Lightning Supply	
• Upto 70kW	Rs. 25/-
• Above 70kW	Rs. 50/-
<b>Replacement of broken glass</b>	
Replacement of broken glass of meter cupboard (When there is default on Consumer Side)	Rs. 50/-
Replacement of broken Glass of single-phase meter if the consumer has broken or tamper and with meter.	Rs. 50/-
Replacement of broken Glass of three phase meter if the consumer has broken or tamper and with meter	Rs. 50/-
<b>Supply of duplicate copies of electricity bills</b>	



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Description	Miscellaneous Charges
Domestic Consumers	Rs. 5 per bill
Non-Domestic consumers	Rs. 10 per bill
LT Industrial upto 20kW and AP Consumer	Rs. 5 per bill
H.T Industrial and Bulk supply consumer	Rs. 10 per bill
<b>Stand by meter</b>	
HT	Rs. 10,000
EHT	Rs. 20,000
<b>Check Meter</b>	
HT	Rs. 10,000
EHT	Rs. 20,000
Load enhancement	Actual Cost + 15% Supervision Charges
System strengthening charges or capacity building charges	Actual Cost + 15% Supervision Charges
<b>Advance for Temporary Connections (Except of Prepaid meters)</b>	
• Single phase LT	Rs. 2,000
• Three phase	Rs. 5,000
• HT	Rs. 20,000
• EHT	Rs. 20,000
<i>Note: this shall be adjusted in bills</i>	
Non-Refundable Registration-cum-processing fees	As per Supply code Regulations notified by JERC
<b>Underground service cable</b>	
1 Phase through underground service cable	Rs.100/metre
Extra Length 1 phase for Agriculture consumer (beyond 300 metres) through underground service cable	Rs.25/metre
3 Phase through underground service cable	Rs.300/metre
Extra Length for 3 Phase for Agriculture consumers (beyond 300 metres) through underground service cable	Rs.100/metre
At location where overhead network exist and consumer desires to avail power through Underground service cable	Actual charges+15%

In case of bonafide agricultural pumping loads, the department shall provide overhead service lines free of cost up to 300 metres from the nearest distribution point, i.e., existing rural transformer sub-station or from a service line already laid for supply to any other consumer,



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provided the latter has sufficient current carrying capacity. Any length in excess of the specified length shall be payable at a fixed cost of Rs. 25 / metre for single phase and Rs. 50/ metre for Three phase as approved under Schedule of General and Miscellaneous Charges.



## 6 TARIFF SCHEDULE FOR FY 2024-25

This Chapter highlights the tariff schedule.

### Tariff Schedule - LT Consumers

**Low Tension Category** - Applicable to Power Supply of Voltages at 230V and 440V Voltages when the Sanctioned Load is below 100 KVA/ 90 KW / 120 HP and power is supplied at single/ three phase.

LT Domestic/LT-D:

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>This schedule shall apply to private residential houses, government residential quarters, Government schools and related facilities, charitable institutions, religious institutions etc. for consumption of energy using normal domestic appliances.</p> <p>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.</p>	<p>a. For the premises or flats which are closed or locked for a continuous period of more than three months and having sanctioned / connected load more than 10 kW, the monthly minimum charges would be Rs. 1000/-</p>	No change Proposed

Tariff for LT Domestic/ LT-D:

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kWh)	Fixed Charges	Energy Charges (Rs. / kWh)
0-100 units	Rs/kW/ Month	20	1.75	20	1.88
101-200 units			2.60		2.79
201 to 300 units			3.30		3.70
301 to 400 units			4.40		4.90
Above 400 units			5.10		5.80



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Low Income Group/ LT-LIG:

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to consumers of Low-Income Group who have a sanctioned load of up to 0.25 kW and who consume up to 50 units per month only.	The applicability of the Low-Income Group category will be assessed at the end of each month and in case the consumption exceeds 50 units per month, the entire consumption would be billed at the rate of LTD-/Domestic for that particular month.	No change Proposed

Tariff for LT-LIG/Low Income Group:

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kWh)	Fixed Charges	Energy Charges (Rs. / kWh)
Consumption up to 50 Units p.m.	Rs./kW/ Month or part thereof	20	-	20	-

Low Tension Commercial/ LT-C:

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>This tariff is applicable to any activity not specifically covered in any other consumer categories, or although covered in another activity, the use is made for a commercial category. It would include electricity used in all non- residential, non-industrial premises and/or commercial premises for commercial consumption meant for operating various appliances. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"> <li>Houses with rent back facilities</li> <li>Government hospitals</li> <li>Professionals not covered in domestic category.</li> </ul>	<p>Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture Allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged commercial tariff.</p>	No change Proposed



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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<ul style="list-style-type: none"><li>Commercial Complexes and Business premises, including Shopping malls/show rooms, offices / shops;</li><li>Combined lighting and power services for Entertainment including film studios, cinemas and theatres, including multiplexes, Race-course, Meeting/Town Halls, Clubs, all types of Guest houses;</li><li>Offices including Government Offices, Commercial Establishments;</li><li>Marriage Halls (including halls attached to religious places), Hotels /Restaurants (without boarding facilities), Ice-cream parlours, Bakeries, Coffee Shops, private hospitals, private messes, Internet / Cyber Cafes, Mobile Towers, Micro-wave Towers, Satellite Antennas used for telecommunication activity, Telephone Booths, Fax / Xerox Shops, X-ray installations, bars and cold drink houses, Tailoring Shops, Computer Training Schools, Typing Institutes, Photo Laboratories, Photo Studios, Laundries, Beauty Parlours and Saloons, dry cleaners etc</li><li>Automobile and any other type of repair centers, Retail Gas Filling stations, Petrol Pumps and Service Stations including Garages, Tyre Vulcanizing units, Battery Charging Units, Tyre vulcanizing centres etc;</li><li>Banks, Telephone Exchanges, TV Station, Microwave Stations, All India Radio (AIR) Stations, ATM Centres etc;</li><li>For common facilities, like Water Pumping / Street Lighting / Lifts / Fire Fighting Pumps / Premises (Security) Lighting, etc. in Commercial Complexes;</li><li>Sports Clubs, Health Clubs, Gymnasium, Swimming Pools;</li><li>Research and Development units/ situated outside Industrial premises;</li></ul>		



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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<ul style="list-style-type: none"> <li>Airports, Railways, Railway Stations, Bus stands of KTC etc;</li> <li>Educational institutions excluding Government Schools and related facilities</li> </ul>		

Tariff for LT Commercial/ LT-C:

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kWh)	Fixed Charges	Energy Charges (Rs. / kWh)
1-100 Units	0-20 kW- Rs./kW/ Month	For consumers with Load upto 20 kW Rs. 45/kW/Month or part thereof	3.60	For consumers with Load upto 20 kW Rs. 45/kW/Month or part thereof	3.97
101-200 units			4.40		4.80
201-400 Units			5.00		5.56
Above 400 units	Above 20kW and upto 90 kW Rs./kW/ Month	For consumers with Load more than 20 kW and upto 90 kW Rs. 70/kW/Month or part thereof	5.30	For consumers with Load more than 20 kW and upto 90 kW Rs. 70/kW/Month or part thereof	6.00

Low Tension Industrial/ LT-I

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>This tariff shall apply to industrial units engaged in industrial activities, manufacturing process etc. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"> <li>Flour Mills, wet grinding, Dal Mills, Rice Mills, Poha Mills, Masala Mills, Saw-Mills, Power looms including other allied activities like Warping, Doubling, Twisting, etc.</li> </ul>	<p>The above-mentioned tariff is based on the supply being given through a single delivery and metering point and at a single voltage.</p>	<p>No change Proposed</p>



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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<ul style="list-style-type: none"> <li>Ice Factories, Ice Cream Manufacturing units/ Plants, Dairy Testing Process, Milk Dairies, Milk Processing/ Chilling Plants (Dairy) etc.;</li> <li>Engineering workshops, Engineering Goods Manufacturing units, Printing Presses, Transformer repairing Workshops, Tyre retreading units, Motive Power Loads etc.;</li> <li>Mining, Quarry and Stone Crushing units etc.;</li> <li>Garment Manufacturing units,</li> <li>LPG/ CNG Bottling plants etc.;</li> <li>Sewage Water Treatment Plants/ Common Effluent Treatment Plants owned, operated and managed by Industrial Associations and situated within industrial area.</li> <li>Pumping of water for public water supply, Sewage Treatment Plants, activities related with public water Supply Schemes and Sewage Pumping Stations.</li> <li>Use of electricity / power supply for activities/ facilities exclusively meant for employees of the industry within the premises of the Industry.</li> <li>IT Industry, IT parks etc.</li> </ul>		

Tariff for Low Tension Industrial/ LT-I:

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kWh)	Fixed Charges	Energy Charges (Rs. / kWh)
0-500 Units	Rs./HP/Month or part thereof	50	3.60	50	3.98
Above 500 units		50	4.25	50	4.65





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Low Tension-Mixed/LT-P (Hotel Industries)

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to Hotels/restaurants with lodging and boarding facilities.	Hotel Industry consumers intending to avail the facility of this tariff should produce a certificate from the Tourism Department stating that the intending applicant is registered under Goa Registration of Tourist Trade Act, 1982 and in the Hotel business on a regular basis. On receipt of the certificate, such tariff shall be made effective from the date of original validity of the certificate. In case of failure to produce the certificate, the same shall be considered under Commercial category.	No change Proposed

Tariff for LTP Mixed (Hotel Industries):

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kWh)	Fixed Charges	Energy Charges (Rs. / kWh)
Total Consumption	Rs./kW/Month or part thereof	60	5.60	60	6.00

LT 4: LT Agriculture/ LTAG/ Agriculture and other Allied Activities

**a. Low Tension-Agriculture/ LT-AGP (Pump Sets/ Irrigation)**

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to establishments for Irrigation pumping, De-watering and Lift Irrigation for cultivation of food crops such as cereals, pulses, vegetables and fruits etc. and	This tariff shall be applicable from the date of production of a certificate from the Directorate of Animal Husbandry or Agriculture Department of Government of Goa to the effect that the consumer carried on the said activity on regular basis. In case of failure to produce the certificate, the same shall be considered under Commercial category.	No change Proposed



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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
Cane crusher and/or fodder cutter for self-use for Agricultural purposes.	Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged Commercial Tariff.	

**Tariff for LT-AGP (Pump Sets/ Irrigation):**

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kWh)	Fixed Charges	Energy Charges (Rs. / kWh)
Total Consumption	Rs./HP/Month or part thereof	18	1.50	18	1.55

**b. Low Tension-Agriculture/ LT-AGA (Allied Activities)**

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>This schedule shall apply to establishments for other allied activities related to Agriculture and shall include but not limited to:</p> <ul style="list-style-type: none"> <li>• Poultry farms, Livestock farms, Combination of livestock farms with dairy, Piggery etc.</li> <li>• Horticulture, Green Houses, Plantations, all types of nurseries etc.</li> <li>• Fish farms including ornamental fish farms, prawn farms, other aqua farms etc.</li> <li>• Tissue culture, Mushroom activities, Aquaculture,</li> </ul>	<p>This tariff shall be applicable from the date of production of a certificate from the Directorate of Animal Husbandry or Agriculture Department of Government of Goa to the effect that the consumer carried on the said activity on regular basis. In case of failure to produce the certificate, the same shall be considered under Commercial category.</p> <p>Cold Storages which are solely attached to</p>	No change Proposed



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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>Floriculture, Fisheries, Sericulture, Floricultural nurseries, hatcheries etc.</p> <ul style="list-style-type: none"> <li>Any other agricultural activity not falling under LT-Agriculture (A) shall be covered under this category.</li> </ul>	<p>Agriculture and its allied activities shall be charged tariff of Agriculture allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged Commercial Tariff.</p>	

**Tariff for LT-AGA (Allied Activities):**

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kWh)	Fixed Charges	Energy Charges (Rs. / kWh)
Total Consumption	Rs./HP/Month or part thereof	25	1.75	25	1.85

**Public Lighting**

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>This schedule shall apply to public lighting systems. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"> <li>Market Places, Roads, Pathways and Parking Lighting belonging to local authorities such as Municipality/ Panchayats/ Government;</li> <li>Lighting in Public Gardens;</li> <li>Traffic Signals and Traffic Islands;</li> <li>State Transport Bus Shelters;</li> <li>Public Sanitary Conveniences; and</li> <li>Public Water Fountains and such other Public Places open for general public free of charge.</li> </ul>		No change Proposed



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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<ul style="list-style-type: none"> <li>Street lighting in the colony of a factory which is situated separately from the main factory.</li> <li>This shall also be applicable to public lighting of Government/ Semi Government Establishments but shall not be applicable in case of private establishments.</li> </ul>		

Tariff for Public Lighting:

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kWh)	Fixed Charges	Energy Charges (Rs. / kWh)
Total Consumption	Rs./kW/Month or part thereof	75	5.65	75	6.00

LT (7): Hoarding & Sign Boards

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to lighting advertisements, hoardings and displays at departmental stores, malls, multiplexes, theatres, clubs, hotels, bus shelters, Railway Stations etc. and shall be separately metered and charged at the tariff applicable for "Hoardings / Sign Board" category. However, use of electricity for displays for the purpose of indicating / displaying the name and other details of the shop, on commercial premises itself, shall be covered under the prevailing tariff for such shops or commercial premises.		No change Proposed

Tariff for Hoarding & Sign Boards:



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Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kWh)	Fixed Charges	Energy Charges (Rs. / kWh)
Total Consumption	Rs./kVA/Month or part thereof	70	10.00	70	11.15

LT (8): Low Tension Temporary Supply/ LTTS

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to usage of electricity for all temporary purposes.	<ul style="list-style-type: none"> <li>The Temporary connection shall be released through a proper meter.</li> <li>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 further extended, as per the provision of Supply Code Regulations notified by JERC.</li> </ul>	No change Proposed

Tariff for LT Temporary Supply:

Consumption Slab	Existing Tariff (Approved in T.O. dated 30.03.23) & Proposed Tariff for FY 2024-25	
	Fixed Charges	Energy Charges
LT Temporary	<p>The 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.</p> <p>For multi activity pursuit, applicable tariff for temporary connection shall be with reference to that of commercial category for permanent supply.</p>	

**Tariff Schedule – HT Consumers**

**High Tension/ Extra High-Tension Category** - Applicable to Power Supply of Voltages at 11 kV/ 33 kV/ 110 kV and above i.e. High/Extra High Voltages when the Contracted Demand is above 100 kVA/ 90 kW / 120 HP and power is supplied at three phase.

High Tension-Domestic/HT-D



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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to individual residential consumers of Bungalows, Villas, Cottages, etc. using normal domestic appliances and whose contract demand falls within the threshold limit of HT category.		No change Proposed

**Tariff for High Tension/Domestic:**

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kVAh)	Fixed Charges	Energy Charges (Rs. / kVAh)
Total Consumption	Rs./kVA/Month or part thereof	110	4.60	110	4.60

**High Tension Industrial/ HT-I**

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>This schedule shall apply to consumers taking electricity supply for Industrial purpose. It shall also include the following categories:</p> <ul style="list-style-type: none"> <li>• Bulk Supply of power at 11 KV, 33 kV /110 KV and above for industries, factories and other industrial purposes.</li> <li>• Bulk supply of power at 11 KV and above for educational institutions owned or aided by Government, non-industrial establishments,</li> <li>• Industrial units engaged in Ice Manufacturing Units;</li> <li>• Hotels with lodging and boarding facilities etc</li> <li>• Use of electricity / power supply by an establishment such as IT Industries, IT Parks, IT Units</li> </ul>		



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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<ul style="list-style-type: none"> <li>Pumping of water, public water supply, public water treatment plant, activities related with Supply Schemes and Sewage Treatment Plants, Sewage Pumping Stations etc.</li> </ul>		

Tariff for HT-I:

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kVAh)	Fixed Charges	Energy Charges (Rs. / kVAh)
11/33 kV	Rs./kVA/Month or part thereof	275	4.95	275	4.95
110 kV	Rs./kVA/Month or part thereof	275	4.90	275	4.90

High Tension Ferro Metallurgical /Steel Rolling/Steel Melting/Power Intensive

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to supply of power having a Contract Demand from 100 KVA up to 1000 KVA at 11 KV and above 1000 KVA at 33 KV for Steel rolling industry and Metal Alloy, Steel Melting, Ferro Alloy, and Ferro metallurgical industries where melting is involved using electric power.		No change Proposed

Tariff Ferro Metallurgical /Steel Rolling/Steel Melting/Power Intensive:

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kVAh )	Fixed Charges	Energy Charges (Rs. / kVAh)
Total Consumption	Rs./kVA/Month or part thereof	275	4.95	275	4.95



High Tension Commercial/ HT-C

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>This tariff is applicable to any activity not specifically covered in any other consumer categories, or although covered in another activity, the use is made for a commercial category. It would include electricity used in all non- residential, non-industrial premises and/or commercial premises for commercial consumption meant for operating various appliances. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"><li>• Houses with rent back facilities</li><li>• Government hospitals</li><li>• Professionals not covered in domestic category.</li><li>• Commercial Complexes and Business premises, including Shopping malls/show rooms, offices / shops;</li><li>• Combined lighting and power services for Entertainment including film studios, cinemas and theatres, including multiplexes, Race-Course, Meeting/Town Halls, Clubs, all types of Guest houses;</li><li>• Offices including Government Offices, Commercial Establishments;</li><li>• Marriage Halls (including halls attached to religious places), Hotels /Restaurants (without boarding facilities), Ice-cream parlours, Bakeries, Coffee Shops, private hospitals, private messes, Internet / Cyber Cafes, Mobile Towers, Microwave Towers, Satellite Antennas used for telecommunication activity, Telephone Booths, Fax / Xerox Shops, X-ray installations, bars and cold drink houses, Tailoring Shops, Computer Training Schools, Typing Institutes, Photo</li></ul>	<p>Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture Allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged commercial tariff.</p>	





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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>Laboratories, Photo Studios, Laundries, Beauty Parlours and Saloons, dry cleaners etc</p> <ul style="list-style-type: none"> <li>• Automobile and any other type of repair centers, Retail Gas Filling stations, Petrol Pumps and Service Stations including Garages, Tyre Vulcanizing units, Battery Charging Units, Tyre vulcanizing centres etc;</li> <li>• Banks, Telephone Exchanges, TV Station, Micro-Wave Stations, All India Radio (AIR) Stations, ATM Centres etc;</li> <li>• For common facilities, like Water Pumping / Street Lighting / Lifts / Fire Fighting Pumps / Premises (Security) Lighting, etc. in Commercial Complexes;</li> <li>• Sports Clubs, Health Clubs, Gymnasium, Swimming Pools;</li> <li>• Research and Development units situated outside Industrial premises;</li> <li>• Airports, Railways, Railway Stations, Bus stands of KTC etc;</li> <li>• Educational institutions excluding Government Schools and related facilities.</li> </ul>		

Tariff for HT Commercial:

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kVAh )	Fixed Charges	Energy Charges (Rs. / kVAh)
Total Consumption	Rs./kVA/Month or part thereof	250	5.25	250	5.25

High Tension MES/Defence Establishments



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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to supply of power for defense installation establishments, having mixed load with predominantly lighting or non-industrial load of more than 50% of connected load.		No change Proposed

**Tariff for MES/Defense Establishments:**

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kVAh)	Fixed Charges	Energy Charges (Rs. / kVAh)
Total Consumption	Rs./kVA/Month or part thereof	220	5.10	220	5.10

**High Tension Agriculture / Agriculture and other Allied Activities**

**a. HT-Agriculture Pump Sets (A)**

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to establishments for Irrigation pumping, De-watering and Lift Irrigation for cultivation of food crops such as cereals, pulses, vegetables and fruits etc and Cane crusher and/or fodder cutter for self-use for Agricultural purposes.	<p>This tariff shall be applicable from the date of production of a certificate from the Directorate of Animal Husbandry or Agriculture Department of Government of Goa to the effect that the consumer carried on the said activity on regular basis. In case of failure to produce the certificate, the same shall be considered under Commercial category.</p> <p>Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged Commercial Tariff.</p>	No change Proposed

**Tariff for Agriculture Pump Sets:**



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Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kVAh)	Fixed Charges	Energy Charges (Rs. / kVAh)
Total Consumption	Rs./kVA/Month or part thereof	40	1.60	40	1.60

**b. HT-Agriculture Allied Activities (B)**

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>This schedule shall apply to establishments for other allied activities related to Agriculture and shall include but not limited to:</p> <ul style="list-style-type: none"> <li>• Poultry farms, Livestock farms, Combination of livestock farms with dairy, Piggery etc.</li> <li>• Horticulture, Green Houses, Plantations, all types of nurseries etc.</li> <li>• Fish farms including ornamental fish farms, prawn farms, other aqua farms etc</li> <li>• Tissue culture, Mushroom activities, Aquaculture, Floriculture, Fisheries, Sericulture, Floricultural nurseries, hatcheries etc.</li> <li>• Any other agricultural activity not falling under HT-Agriculture (A) shall be covered under this category.</li> </ul>	<p>This tariff shall be applicable from the date of production of a certificate from the Directorate of Animal Husbandry or Agriculture Department of Government of Goa to the effect that the consumer carried on the said activity on regular basis. In case of failure to produce the certificate, the same shall be considered under Commercial category.</p> <p>Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged Commercial Tariff.</p>	No change Proposed

Tariff for Agriculture Allied Activities:



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Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kVAh )	Fixed Charges	Energy Charges (Rs. / kVAh)
Total Consumption	Rs./kVA/Month or part thereof	70	1.95	70	1.95

High Tension Temporary Supply/ HT-HTTS

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to usage of electricity for all temporary purposes.	<ul style="list-style-type: none"> <li>The temporary connection shall be released through a proper meter</li> <li>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 further extended, as per the provisions of Supply Code Regulations notified by JERC.</li> </ul>	No change Proposed

Tariff for HT Temporary Supply:

Consumption Slab	Existing Tariff (Approved in T.O. dated 30.03.23) & Proposed Tariff for FY 2024-25	
	Fixed Charges	Energy Charges
HT Temporary	<p>The 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.</p> <p>For multi activity pursuit, applicable tariff for temporary connection shall be with reference to that of commercial category for permanent supply.</p>	

High Tension Single Point Supply/ HT SPS

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
This schedule shall apply to a group of consumers who desire to take a HT connection at single	In case of a dispute on whether the complex can be classified as an industrial complex, a certificate from Industries Department, Government of Goa will be required.	No change Proposed



Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
point for consumption of energy within a Residential Complex – Group Housing Societies, Residential Housing Colonies, Cooperative Group Housing Societies, Township Areas; Commercial Complexes, including Malls; Industrial Complexes, including IT Parks, Bio-Parks or other entities classified as industries by the Government of Goa.	<p>The following shall be the different combinations for SPS in a defined area:</p> <ol style="list-style-type: none"> <li>1. All LT consumer mix area</li> <li>2. All HT consumer mix area</li> <li>3. HT+LT consumer mix area</li> </ol> <ol style="list-style-type: none"> <li>a. The General Conditions, Miscellaneous and General Charges would also be applicable for all SPS categories.</li> <li>b. Based on technical and administrative feasibility, the ED-Goa may consider providing SPS power supply at HV/ EHV level to a complex at a mutually agreed injection point.</li> <li>c. The SPS arrangement would be applicable for the application received from a Residential complex / Association of Persons (AOP) / Developer of the complex or any other such similar person.</li> <li>d. The SPS arrangement would be considered by ED-Goa only if the minimum sanctioned cumulative contracted demand of the complex (group of consumers) is 1.15 MVA/ 1 MW.</li> <li>e. The complete cost of erection and O&amp;M for the sub-transmission and distribution infrastructure within such complex would need to be borne by the said SPS applicant.</li> <li>f. The SPS applicant would be required to develop and maintain an efficient, coordinated and quality sub-transmission and distribution system in its area of electricity supply. Further, the applicant would be responsible to comply with Standards of Performance and Supply Code Regulation as laid down under JERC Regulations and guidelines of Goa Electricity Department, if any. The network within the complex will need to be certified by the Chief Electrical Inspector.</li> <li>g. For Residential Complexes, SPS application shall be entertained for groups of LT consumers only. The loads of common amenities for such group may include pumps for pumping water supply, lifts and lighting of common area. However, the consumption</li> </ol>	



Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
	<p>of energy for common services shall be separately metered with meters installed by the consumer and tested and sealed by Licensee. The consumption of such energy over and above 10% of the total consumption of energy shall be billed at LT Commercial 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 to the licensee at the time of seeking the connection or at the time of enhancement in contract demand, and shall seek a separate connection for the same in case the common load is more than 10%.</p> <p>h. Individual Domestic HT consumers in a residential complex that opt for SPS shall need to apply separately under HT Domestic category.</p> <p>i. The SPS applicant shall not charge tariff to the downstream consumers higher than stipulated.</p> <p>j. The applicant shall be obliged to pay the total tariff (total billed amount) due to ED-Goa, as measured at HT end of SPS. However, to cover energy transformation losses and other O&amp;M expenses, such applicant would be eligible to get rebates from ED-Goa on full bill payment, within the due time:</p> <ul style="list-style-type: none"><li>(i) 5% on the overall billed amount in all cases of LT and HT consumers</li><li>(ii) Any other loss would be to the account of the applicant.</li></ul> <p>k. For CC and IC applicant, any LT / HT Consumer in the area should have minimum 80% pre-dominant load of their appropriate category i.e. mix load is allowed only upto 20%. For e.g. If a HT/ LT Industry Consumer has Factory, Residential Colony for its workers and also some Commercial facilities for his staff and the total of Residential and Commercial load is say around 30%, then separate Individual SPD connection may be taken for each such group as per activity.</p> <p>l. The implementation of SPS arrangement should be in accordance with the Electricity Act, 2003 and</p>	



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Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
	APTEL judgment dated 11th July 2011 in appeal no. 155 and 156 of 2010 in this regard.	

**Tariff for HT Single Point Supply:**

Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kVAh)	Fixed Charges	Energy Charges (Rs. / kVAh)
Residential Complex	Rs./kVA/Month or part thereof	110	4.60	110	4.60
Commercial Complex	Rs./kVA/Month or part thereof	250	5.25	250	5.25
Industrial Complex	Rs./kVA/Month or part thereof	275	4.95	275	4.95

**Electric Vehicle Charging Station:**

Existing Applicability Clause	Point of Supply/Notes	Proposed Applicability Clause
<p>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, Gol and Central Electricity Authority (CEA) from time to time.</p> <p>The tariff for domestic consumption shall be applicable for domestic charging (LT/HT)</p>		No change Proposed

**Tariff EV Charging Station:**

*\*This tariff is applicable only for supply at HT. In case of LT supply, tariff will be INR 0.20/kVAh higher than the above tariff.*



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Consumption Slab	Basis of Fixed charge	Existing Tariff (Approved in T.O. dated 30.03.23)		Proposed Tariff for FY 2024-25	
		Fixed Charges	Energy Charges (Rs. / kVAh)	Fixed Charges	Energy Charges (Rs. / kVAh)
Total Consumption	NA	-	4.50*	-	4.60*





## 7 REVENUE FROM SALE OF POWER AT PROPOSED TARIFF

For FY 2024-25, the Government of Goa has decided to hike the tariff for consumers as is being levied on them currently.

The Revenue from sale of power at proposed tariff rates by ED-Goa for FY 2024-25 is outlined below. The detailed proposed tariff structure has been discussed in the Tariff philosophy chapter. The detailed computation has been provided in Format F 23 of the MYT Tariff Formats.

**Table 7-1: Revenue from Sale of Power at Proposed Tariff from FY 2024-25 (Rs. Cr.)**

S/No	Category	Revenue for FY 2024-25 from Proposed Retail Tariff Proposed by EDG (In INR Cr)				
		Full year revenue (Rs. Crore)				Average Billing Rate (Rs/kWh)
		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total	
1	Domestic	1,455.58	47.86	470.59	518.45	3.56
(i)	LT-D Domestic	1,454.18	47.79	470.41	518.20	3.56
	0-100 units	551.62	15.43	103.70	119.14	2.16
	101-200 units	352.29	11.77	98.29	110.06	3.12
	201-300 units	194.77	8.33	72.06	80.40	4.13
	301-400 units	109.32	4.53	53.57	58.09	5.31
	Above 400 units	246.19	7.73	142.79	150.52	6.11
(ii)	Low Income Group	0.99	0.00	0.00	0.00	0.02
(iii)	HT-D Domestic	0.41	0.07	0.18	0.24	5.92
2	Commercial	786.25	70.70	408.11	478.82	6.29
(i)	LT-C Commercial	570.49	29.80	299.78	329.58	6.04
	0-100 units	91.46	8.50	34.73	43.23	4.94
	101-200 units	58.16	2.85	26.70	29.55	5.31
	201-400 units	74.91	3.46	39.83	43.29	6.04
	Above 400 units	345.97	14.98	198.53	213.51	6.45
(ii)	HT-C Commercial	215.76	40.90	108.33	149.23	6.92
3	Industrial	2,593.50	246.13	1,184.91	1,431.04	5.51
(i)	LT-I Industrial	94.18	9.79	43.58	53.36	5.55
	0-500 units	17.04	4.40	6.93	11.32	6.51
	Above 500 units	77.14	5.39	36.65	42.04	5.33
(ii)	Low Tension-Mixed/LT-P (Hotel Industries)	3.39	0.18	1.95	2.13	6.57
(iii)	High Tension-I/HT-I	1,908.48	197.98	833.82	1,031.80	5.41
	Connected at 11/33 kV	1,574.96	173.17	669.37	842.54	5.35
	Connected at 110 kV	333.52	24.81	164.45	189.27	5.67
(iv)	High Tension-Ferro/SM/PI/SR	587.45	38.18	305.56	343.74	5.85
4	Agriculture	43.64	2.20	7.57	9.78	2.24



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S/No	Category	Revenue for FY 2024-25 from Proposed Retail Tariff Proposed by EDG (In INR Cr)				
		Full year revenue (Rs. Crore)				Average Billing Rate (Rs/kWh)
		Sales in MU	Revenue from Fixed Charges	Revenue from Energy Charges	Total	
(i)	Low Tension-AG/LT-AGP (Pump Sets/Irrigation)	19.37	1.11	3.00	4.11	2.12
(ii)	Low Tension-AG/LT-AGA (Allied Activities)	1.57	0.08	0.29	0.37	2.36
(iii)	High Tension-AG/HT-AGP (Pump Sets/Irrigation)	6.26	0.75	1.01	1.76	2.82
(iv)	High Tension-AG/HT-AG (Allied Activities)	16.44	0.27	3.27	3.53	2.15
5	<b>Military Engineering Services/ defense Establishments</b>	<b>36.45</b>	<b>2.59</b>	<b>8.97</b>	<b>11.57</b>	<b>3.17</b>
6	<b>Public Lighting</b>	<b>55.14</b>	<b>1.41</b>	<b>33.08</b>	<b>34.50</b>	<b>6.26</b>
7	<b>Hoardings/Signboards</b>	<b>0.16</b>	<b>0.06</b>	<b>0.18</b>	<b>0.24</b>	<b>14.54</b>
8	<b>Temporary</b>	<b>36.98</b>	<b>3.35</b>	<b>21.73</b>	<b>25.08</b>	<b>6.78</b>
(i)	LT	31.36	1.80	17.50	19.30	6.15
	LT Domestic	3.74	0.17	1.05	1.23	3.28
	LT Commercial	27.62	1.63	16.45	18.08	6.54
(ii)	HT	5.62	1.55	4.23	5.78	10.28
9	<b>Single Point Supply</b>	<b>7.00</b>	<b>0.75</b>	<b>3.47</b>	<b>4.22</b>	<b>6.02</b>
(i)	Residential Complexes	0.00	0.00	0.00	0.00	0.00
(ii)	Commercial Complexes	7.00	0.75	3.47	4.22	6.02
(iii)	Industrial Complexes	0.00	0.00	0.00	0.00	0.00
10	<b>Other Categories</b>	<b>7.04</b>	0.00	13.81	13.81	4.60
(i)	EV Charging Stations	7.04	0.00	13.81	13.81	4.60
	<b>TOTAL</b>	<b>5,021.76</b>	<b>375.05</b>	<b>2,152.44</b>	<b>2,527.50</b>	<b>5.03</b>

EDG prays and requests the Hon`ble Commission to approve the hike in the consumer tariff proposed for FY 2024-25.

Based on the Aggregate Revenue Requirement and revenue calculation based on the existing tariff, the revenue gap/ (surplus) for FY 2024-25 after revision of tariffs has been computed as shown in the table below:

**Table 7-2: Revenue Gap for FY 2024-25 (Rs. Cr.)**

Particulars	FY 2024-25
Net Revenue Requirement	3,057.54
Revenue from Sale of Power at existing Tariff	2,442.60
Revenue from Sale of Power at proposed Tariff	2,527.50
<b>Revenue Gap during the Year (at proposed Tariff)</b>	<b>414.73</b>



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In view of above, the Hon'ble Commission is requested to kindly approve the Revenue Gap for FY 2024-25 at proposed tariff.

Further, EDG submits that the Revenue Gap for FY 2024-25 is proposed to be bridged partially through tariff hike on the Consumers of LT Category, increase in the Tariff Slab for the Evening Peak Load Period (6:00 PM to 11:00 PM) from 120% to 140% of normal rate of energy charge (for HT/EHT Category of Consumers) and remaining through budgetary support.



## 8 PROPOSAL TO MEET ARR AND REVENUE GAP OF FY 2024-25

### Cumulative Revenue Gap till FY 2024-25

The revenue gap for FY 2022-23 claimed in the True-up Petition is considered as final (Provisionally) as the provisional annual accounts for the said Financial Year has been submitted to CAG for audit purposes. The said Revenue Gap after True-up shall be met entirely through budgetary support from the Government of Goa.

Therefore, the Revenue Gap carried forward as per the true-up submitted in this petition is NIL. In view of this, cumulative Revenue Gap after proposed tariff, to be claimed in FY 2024-25 is as shown below.

**Table 8-1: Cumulative Revenue gap to be claimed in FY 2024-25 (Rs. Cr.)**

Particulars	Formula	APR	Ensuing Year
		FY 2023-24	FY 2024-25
Net ARR	A	3,029.27	3,057.54
Revenue from Existing Tariff	B	2,795.08	2,442.60
Revenue Gap for the Year (at existing tariff)	C=A-B	234.20	614.94
Opening Balance of Gap	D	-	-
Total Cumulative Gap for years	E=C+D	234.20	614.94
Less: Budgetary Support commitment provided	F	234.20	414.73
Balance Gap to be recovered from FY 22-23	G=E-F	-	-
Proposed Gap Recovery in FY 2023-24	H=E-F	-	200.22
Proposed Tariff Increase over last year	I	-	84.90
Projected additional Revenue on Tariff Hike through ToD for HT Category	J	-	115.31
<b>Budgetary Support required from Government of Goa to meet balance Revenue Gap</b>	<b>K=H-I-J</b>	-	-

EDG submits that it proposes to recover the cumulative Revenue Gap till FY 2024-25, after tariff revision, through budgetary support from the Government of Goa.



## 9 SEGREGATION OF WHEELING AND SUPPLY BUSINESS

### Allocation Policy

EDG submits the bifurcation of all expenses of FY 2024-25 between the functions of wheeling business (wire business) and retail supply business based on Regulation 49 of the MYT Regulations, 2021. The summary of the allocation statement and the segregation of ARR into wheeling and retail supply business for FY 2024-25 is given in the table below:

**Table 9-1: Allocation Statement Wheeling and Retail Supply for FY 2024-25 (Rs. Cr.)**

Sr. No.	Particulars	Wires Business	Retail Supply Business	Total	Wheeling Business (₹ crore)	Retail Supply Business (₹ crore)
		%	%	Projection FY 2024-25	Projection FY 2024-25	Projection FY 2024-25
<b>A</b>	<b>Receipts</b>					
1	Revenue from Sale of Power			2,442.60		
<b>B</b>	<b>Expenditure</b>					
1	Cost of Power Purchase from Own Generating Stations					
2	Cost of Power Purchase from other Generating Stations	0%	100%	2,223.96	0.00	2,223.96
3	Inter-State Transmission Charges	0%	100%			
4	Intra-State Transmission Charges	0%	100%			
5	SLDC Fees & Charges					
6	O&M Expenses (Gross)			570.81	263.92	306.89
	a) R&M Expenses	90%	10%	62.27	56.05	6.23
	b) Employee Cost	40%	60%	463.96	185.58	278.38
	c) A&G Expenses	50%	50%	44.58	22.29	22.29
7	Depreciation	90%	10%	101.95	91.76	10.20
8	Interest and Finance Charges	90%	10%	80.46	72.42	8.05
9	Interest on Working Capital	10%	90%	9.38	6.50	2.88
10	Prior Period Expenses					
	Interest on Consumer Security Deposit	10%	90%	16.51	1.65	14.86
11	Extraordinary Items					
12	Bad and Doubtful Debts	0%	100%	-	-	-
13	Other Debts and Write-offs					
14	Statutory Levies and Taxes, if any					
15	Less: Expenses Capitalised					
	a) Interest Charges Capitalized					
	b) R&M Expenses Capitalized					
	c) A&G Expenses Capitalized					
	d) Employee Cost Capitalized					



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Sr. No.	Particulars	Wires Business	Retail Supply Business	Total	Wheeling Business (₹ crore)	Retail Supply Business (₹ crore)
		%	%	Projection	Projection	Projection
				FY 2024-25	FY 2024-25	FY 2024-25
	<b>Sub Total (a+b+c+d)</b>					
	<b>Sub Total Expenditure (1 to 14-15)</b>			3,003.08	436.25	2566.83
C	Return on Equity	90%	10%	106.51	95.86	10.65
D	Less: Non-Tariff and other Income	10%	90%	52.06	5.21	46.85
E	Less: Any Grant/ Subventions, other subsidy provided by the Government					
F	<b>Annual Revenue Requirement (B+C-D-E)</b>			<b>3,057.54</b>	<b>526.90</b>	<b>2530.63</b>
G	<b>Revenue Gap 'Surplus(+)' / Shortfall (-) (A-F) - Before Tariff Revision</b>			<b>(614.94)</b>		
H	<b>Energy Sales</b>			<b>5,021.76</b>		
I	<b>Average Cost of Supply (Rs./kWh)</b>			<b>6.09</b>		

The Hon'ble Commission is requested to approve the segregation of ARR into Wheeling & Retail Supply Business for FY 2024-25 as per above table.



## 10 DETERMINATION OF CHARGES RELATED TO OPEN ACCESS

### Approach for computation of open access charges

EDG submits that as per Regulation 68.2 and 68.3 of MYT Regulations, 2021, the category-wise cost of supply needs to be computed for facilitating determination of tariff and for gradual reduction of cross subsidy. Cost of supply study also facilitates determination of cross subsidy surcharge. However, the cost of supply methodology suggested by APTEL is based on voltage-wise segregation.

In absence of relevant data for computation of open access charges, EDG requests Hon'ble Commission to consider the same methodology and approach as approved in Tariff Order for FY 2023-24 dated 30<sup>th</sup> March 2023.

Accordingly, EDG has computed open access charges considering the following wheeling losses for HT & EHT and allocation % for wheeling cost between HT & LT as approved in Tariff Order for FY 2023-24.

Wheeling Loss at HT & EHT Level - 3.55% (balance losses attributable to LT Level)

### Computation of Wheeling Charge and losses

In line with methodology, adopted by Hon'ble Commission in previous tariff orders for FY 2022-23 and FY 2023-24 and based on above mentioned projections for Wheeling ARR for FY 2024-25, EDG has calculated wheeling charges for LT and HT/EHT level. Following methodology has been adopted:

- O&M Expenses consisting of Employee, A&G and R&M expenses are allocated to each voltage level based on number of consumers.
- All expenses other than the O&M expenses are allocated to each voltage level based on 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.

EDG submits that parameters assumed for allocation of wheeling cost at LT and HT/EHT level are tabulated below:

**Table 10-1: Parameters assumed for allocation of Wheeling Cost**

Input	Consumers	Asset Allocation (%)	Sales (MU)	Cumulative Voltage Wise Losses (%)	Energy Input (MU)
Low Tension (LT) Level	7,27,399	60%	2,228.87	11.81%	2,528.07



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Input	Consumers	Asset Allocation (%)	Sales (MU)	Cumulative Voltage Wise Losses (%)	Energy Input (MU)
High Tension (HT)/ Extra High Tension (EHT) Level	1342	40%	2,792.89	3.55%	2,895.68
<b>Total</b>	<b>7,28,741</b>	<b>100%</b>	<b>5,021.76</b>	<b>7.41%</b>	<b>5,423.76</b>

Based on above assumption of parameters, the wheeling charge at LT and HT/EHT level has been determined as shown below.

**Table 10-2: Allocation of Wheeling Cost based on voltage Level for FY 2024-25**

Input	O&M Expenses (Rs.Cr.)	Other Expenses (Rs.Cr.)	Total Expenses (Rs.Cr.)	Sales (MU)
Low Tension (LT) Level	263.45	157.79	421.24	2,228.87
High Tension (HT)/ Extra High Tension (EHT) Level	0.47	105.20	105.67	2,792.89
<b>Total</b>	<b>263.92</b>	<b>262.98</b>	<b>526.90</b>	<b>5,021.76</b>

**Table 10-3: Computation of Wheeling Charge for FY 2024-25**

Category	O&M Expenses (Rs.Cr)	Other Expenses (Rs.Cr)	Total Expenses (Rs.Cr)	Sales (MU)	Wheeling Charges (Rs./kWh)
Low Tension (LT) Level	263.45	157.79	421.24	2,228.87	1.89
High Tension (HT)/ Extra High Tension (EHT)Level	0.47	105.20	105.67	2,792.89	0.38
<b>Total</b>	<b>263.92</b>	<b>262.98</b>	<b>526.90</b>	<b>5,021.76</b>	<b>1.05</b>

**Table 10-4: Wheeling Charge**

Category	Wheeling Charges (Rs./kWh)	
	Approved in T.O FY 2023-24	Projection for FY 2024-25
Low Tension (LT) Level	1.67	1.89
High Tension (HT)/ Extra High Tension (EHT)Level	0.12	0.38
<b>Total</b>	<b>1.79</b>	<b>1.05</b>

Therefore, EDG requests the Hon'ble Commission to approve wheeling charge for HT/EHT and LT category as computed in the above tables.





## Computation of Additional Surcharge for FY 2024-25

The Hon'ble 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. The Regulation 4.5 (1) of the said Regulations specifies 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.]"*

In line with above Regulations, EDG has determined the Additional Surcharge as per the following:

**Table 10-5: Additional Surcharge for FY 2024-25**

Category	FY 2024-25	
	Approved in T.O FY 2023-24	Projection for FY 2024-25
Total Power Purchase Cost for FY 2022-23 (Rs. Cr)	2027.60	2,223.96
Fixed Cost Component in Power Purchase Cost (excluding transmission charges) (Rs. Cr)	425.19	425.33
Energy Sales (MU)	4,570.01	5,021.76



Category	FY 2024-25	
	Approved in T.O FY 2023-24	Projection for FY 2024-25
Additional Surcharge (INR/kWh)	0.93	0.85

EDG requests the Hon'ble Commission to approve additional surcharge for FY 2024-25 as computed in the above table.

### Computation of Cross Subsidy Surcharge for FY 2024-25

The National Electricity Policy as stipulated by the Central Government provides that –Under sub – section (2) of Section 42 of the Act, a surcharge is to be levied by the respective State Commissions on consumers switching to alternate supplies under open access. This is to compensate the host distribution licensee serving such consumers who are permitted Open Access under Section 42 (2), for loss of cross subsidy element built into the tariff of such consumers. An additional surcharge may also be levied under sub – section (4) of section 42 of the said Act for meeting the fixed cost of the distribution licensee arising out of obligation to supply in cases where consumers are allowed open access.

The Government of India has notified the National Tariff Policy, 2016 on 28<sup>th</sup> January 2016. The Cross-Subsidy surcharge is based on the following formula given in the Tariff Policy, 2016 which is as follows:

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

Where,

*S is the surcharge*

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

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

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

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

*R is the per unit cost of carrying regulatory assets.”*

However, calculation of Cross subsidy surcharge is calculated in this chapter as per methodology adopted by Hon'ble Commission in the previous Tariff Orders for FY 2022-23 and FY 2023-24.

Voltage wise losses for HT/EHT is considered at 3.55%. In order to maintain the Intra-State Distribution loss at 8.45% for FY 2024-25, losses at LT level has been computed. Accordingly, voltage wise losses considered for the calculation of Cross-subsidy Surcharge for FY 2024-25 is provided as below:



**Table 10-6: Voltage wise losses assumed for FY 2024-25**

Category	Voltage Level Losses (%)	Cumulative Loss up to that voltage level (%)
Low Tension (LT) Level	13.71%	13.42%
High Tension (HT)/ Extra High Tension (EHT)Level	3.55%	3.55%
<b>Total</b>	<b>7.41%</b>	<b>7.41%</b>

Based on the Voltage-wise energy sales projected for FY 2024-25, voltage level-wise energy input is calculated as given below:

**Table 10-7: Voltage wise Energy Input for FY 2024-25**

Category	Sales (MU)	Cumulative Loss up to that voltage level (%)	Energy Input (MU)
Low Tension (LT) Level	2228.87	13.42%	2528.07
High Tension (HT)/ Extra High Tension (EHT) Level	2792.89	3.55%	2895.68
<b>Total</b>	<b>5021.76</b>	<b>7.41%</b>	<b>5423.76</b>

Overall ARR arrived for FY 2024-25 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 based on the energy input at respective voltage levels.
- The O&M expenses are allocated to each voltage level based on the number of consumers. The resultant cost allocated to HT/EHT level is then further allocated between HT/EHT and LT level based on the input energy, as the HT/EHT network is utilized by both LT and HT/EHT network consumers.
- The remaining fixed costs are allocated based on the voltage wise asset allocation assumed earlier and further allocated to respective voltage levels based on input energy.



**Table 10-8: Parameters used for allocation of Fixed Costs for FY 2024-25**

Category	Energy Input (MU)	Voltage Wise Allocation (%)	Number of Consumers
Low Tension (LT) Level	2,528.07	60%	7,27,399
High Tension (HT)/ Extra High Tension (EHT) Level	2,895.68	40%	1,342
<b>Total</b>	<b>5,423.76</b>	<b>100%</b>	<b>7,28,741</b>

The Variable component of the Power purchase cost is allocated based on the energy input.

The Voltage wise cost of supply (VCoS) is then calculated based on the energy sales of respective categories. Accordingly, the VCoS is determined as shown in the table below:

**Table 10-9: Voltage Wise Cost of Supply (VCoS) for FY 2024-25**

Category	Allocated Fixed Cost (Rs.Cr.)	Allocated Variable Cost (Rs.Cr.)	Total Cost (Rs.Cr.)	Energy Sales (MU)	VCoS (Rs./kWh)
Low Tension (LT) Level	902.00	695.97	1,597.97	2,528.07	6.32
High Tension (HT)/ Extra High Tension (EHT) Level	662.39	797.18	1,459.57	2,895.68	5.04
<b>Total</b>	<b>1,564.39</b>	<b>1,493.15</b>	<b>3,057.54</b>	<b>5,423.76</b>	<b>5.64</b>

As per above VCoS calculated and applicable level wise ABR level, EDG has computed the Cross-Subsidy Surcharge for FY 2024-25 as provided in the table give below:

**Table 10-10: Cross-Subsidy Surcharge for FY 2024-25**

Category	VCoS (Rs./kWh)		ABR (Rs./kWh)		Cross Subsidy Surcharge (Rs./kWh)	
	Approved in T.O FY 2023-24	Projection for FY 2024-25	Approved in T.O FY 2023-24	Projection for FY 2024-25	Approved in T.O FY 2023-24	Projection for FY 2024-25
Low Tension (LT) Level	7.68	6.32	6.03	3.52	-	-
High Tension (HT)/ Extra High Tension (EHT) Level	4.33	5.04	3.87	5.36	-	0.32

Therefore, EDG requests the Hon'ble Commission to approve the cross-subsidy surcharge for FY 2024-25 as computed in the above tables.



## 11 COMPLIANCE OF DIRECTIVES GIVEN BY HON'BLE COMMISSION

EDG submits that the Hon'ble Commission in its Tariff Order for FY 2023-24 dated 30<sup>th</sup> March 2023 had laid down certain directives to be complied by EDG. The directives as provided by the Hon'ble Commission and the status of the said directives are replied as below:

### Status of Compliance of Directives issued in tariff order dated 30<sup>th</sup> March 2023

S/No	Directives in Brief	Commission's Direction in the Tariff Order for FY 2023-24 dated 30 <sup>th</sup> March 2023	Compliance by the Electricity Department, Goa
1.	Energy Audit Reports	<p><b>Commission's Latest Directive in Tariff Order dated 31st March 2022</b></p> <p>The Commission has noted with serious concern that the Petitioner has not submitted the Energy Audit Reports for previous years despite repeated directions. The Commission directs the Petitioner to expedite the process and complete the Energy Audit of the State on priority, and positively submit the same along with Tariff Petition for FY 2023-24.</p> <p><b>Petitioner's Response in the Present Tariff Petition</b></p> <p>As per the guidelines from Bureau of Energy Efficiency, Quarterly and Annual Audits have to be carried out by each DISCOM. EDG has already submitted draft Annual Audit reports for the year 2020-21 and 2021-22 to the consultant appointed by GED for scrutiny. The Quarter and Annual reports for the year 2020-21 and 2021-22 will be submitted to BEE immediately after the scrutiny from the consultants and the same will be submitted to Hon'ble JERC.</p> <p><b>Commission's Response</b></p> <p>The Commission has noted the Petitioner submission and directs the Petitioner to expedite the process and complete the Energy Audit of the State on priority, and positively</p>	<p><b>Submission:</b></p> <p>EDG has performed the Energy Audit Report for the FY 2022-23 and Quarterly Energy Audit Report for FY 2023-24 and submitted the same before Bureau of Energy Efficiency.</p> <p>The relevant documents are submitted along with this petition as <b>Annexure-9</b>.</p>



S/No	Directives in Brief	Commission's Direction in the Tariff Order for FY 2023-24 dated 30 <sup>th</sup> March 2023	Compliance by the Electricity Department, Goa
		submit the same along within three months of issuance of this order.	
2.	Sub Divisions as Strategic Business Units	<p><b>Commission's Latest Directive in Tariff Order dated 31st March 2022</b> The Commission is yet to receive the compiled data as stated by the Petitioner. The Petitioner is directed to submit the same within one month of the issuance of this Order.</p> <p><b>Petitioner's Response in the Present Tariff Petition</b> While collecting the Data for Strategic Business Unit for Sub-Division of Division 4 &amp; 17 it is observed that the Sub-Divisions of the said divisions are transferring power between them and the same is not accounted. In this regard there is an issue in determining the exact distribution loss at Sub-Division Level. So, after completion of the Energy Auditing at Sub-Division level the same shall be initiated.</p> <p><b>Commission's Response</b> The Commission is yet to receive the compiled data as stated by the Petitioner. The Petitioner is directed to submit the same within three month of the issuance of this Order.</p>	<p><b>Submission:</b> Collection and validation data for Strategic Business Unit for Sub-Division of Division - 17 is completed and the same is submitted in the <b>Annexure-10</b>. Further the Collection of Data for SBU-17 is in process and the same will be completed by March-2024.</p>
3.	Installation of Pre Paid Meters	<p><b>Commission's Latest Directive in Tariff Order dated 31st March 2022</b> The Commission directs the Petitioner to expedite the process and submit an updated status with the next quarterly progress report.</p> <p><b>Petitioner's Response in the Present Tariff Petition</b></p>	<p><b>Submission:</b> The Tender for Prepaid Smart meters was issued on 21/01/2023 and date of opening of Tender was scheduled on 15/02/2023. However, the tender was cancelled on 18/05/2023 due to technical issues and re-floated on 14/06/2023. The tender was cancelled again as no bidders</p>



S/No	Directives in Brief	Commission's Direction in the Tariff Order for FY 2023-24 dated 30 <sup>th</sup> March 2023	Compliance by the Electricity Department, Goa
		<p>The Electricity Department has been sanctioned 750356 Prepaid Smart meters under Revamped Distribution Sector Scheme (RDSS) as per the Sanction letter dated 10/10/2022 attached as Annexure-4. The Electricity Department is in process of obtaining approvals for floating of the tender. The timelines for installation of all Pre-paid Smart meters is March, 2025.</p> <p><b>Commission's Response</b> The Commission directs the Petitioner to expedite the process and submit an updated status with the next quarterly progress report.</p>	<p>had quoted for the tender. The tender has been re-floated on 06/11/2023 and the technical opening of tender is on 27//11/2023. The timelines for installation of all Prepaid Smart Meters as per scheme guidelines is March, 2025.</p>
4.	Unbundling of Electricity Department	<p><b>Commission's Latest Directive in Tariff Order dated 31st March 2022</b> The Commission directs the Petitioner to submit the documentary evidence for the decision of the Govt. of Goa to the Commission within one month of the issuance of this Order.</p> <p><b>Petitioner's Response in the Present Tariff Petition</b> EDG had submitted proposal to the Government in regard to Unbundling of the Electricity Department. The documentary evidence in regard to the decision of the Government will be submitted no sooner received from the Government of Goa.</p> <p><b>Commission's Response</b> The Commission directs the Petitioner to pursue the matter on priority and submit the documentary evidence for the</p>	<p><b>Submission:</b> The documentary evidence of the decision of the Govt of Goa will be submitted once it is received from the Government of Goa.</p>



S/No	Directives in Brief	Commission's Direction in the Tariff Order for FY 2023-24 dated 30 <sup>th</sup> March 2023	Compliance by the Electricity Department, Goa
		decision of the Govt. of Goa to the Commission within three month of the issuance of this Order.	
5.	<b>Renewable Purchase Obligation</b>	The Commission appreciates the efforts undertaken by the Petitioner towards fulfilment of RPO. The Petitioner is emphasizing on procuring more physical power than purchase REC's in accordance with the Commissions directions. The Petitioner is directed to continue its efforts towards fulfilment of RPO and ensure yearly compliance are achieved.	<b>Submission:</b> ED-Goa has fulfilled 51.78% (FY 2023-24 April to September) considering the projected sales position on the individual yearly target along with the Backlog from previous years. Further EDG will try to fulfil the RPO target of the Hon'ble JERC.
6.	<b>Determination of Category wise/ Voltage wise Cost of supply</b>	<p><b>Commission's Directive in Tariff Order dated 19th May 2020</b> The Petitioner is directed to expedite the process of energy audit and submit the requisite data and the proposal along with the next tariff petition.</p> <p><b>Petitioner's Response in the Present Tariff Petition</b> The surveyors are already deployed at every division for GIS mapping of 11kV/33 kV assets and the entire exercise is likely to be completed by 31st March 2021.</p> <p><b>Commission's Response</b> The Petitioner is directed to expedite the process of energy audit and submit the requisite data and the proposal along with the next tariff petition.</p>	<p><b>Submission:</b> EDG was trying finalize energy audit and voltage wise energy accounting, however, the same got delayed due to communication issues in modem of feeder &amp; DT meters, which has been resolved now.</p> <p>However, now, EDG is in the process initiating the works to implement the Smart Meters. Further, EDG would be implementing a Pilot Project to determine the Voltage wise Cost of Supply at Division and Sub-Division Level. If determined to be viable, EDG will undertake the same for the State of Goa.</p>
7.	<b>Collection of data based on consumer type</b>	<p><b>Commission's Directive in Tariff Order dated 31st March 2022</b> The Commission directs ED-Goa to start collecting information of energy sales, connected load, number of consumers, power factor, ToD sales etc., wherever applicable, for different type of consumers such as Hotel</p>	<b>Submission:</b> EDG adheres to the Hon'ble Commission's request and submits the information in this Tariff Petition for FY 2024-25 as <b>Annexure-11</b> .





S/No	Directives in Brief	Commission's Direction in the Tariff Order for FY 2023-24 dated 30 <sup>th</sup> March 2023	Compliance by the Electricity Department, Goa
		<p>Industries, Govt./Private educational institutions, Govt./Private hospitals etc. within the existing categories and submit the requisite information along with the next quarterly progress report. The Commission is yet to receive the requisite details from the Petitioner. The Commission directs the Petitioner to submit the same within one month of the issuance of this Order.</p> <p><b>Petitioner's Response in the Present Tariff Petition</b> The requisite data has been submitted to the Commission in the MYT ARR Tariff Petition No.63 of 2021 in the Annexure-6.</p> <p><b>Commission's Response</b> The Commission has noted the Petitioner's submission and accordingly drops this directive. Further, the Petitioner is directed to submit the requisite data along with the tariff petitions from next year onwards.</p>	
8.	kVAh based tariff for LT-Industrial and LT-Commercial categories	<p><b>Commission's Directive in Tariff Order dated 31st March 2022</b> The Petitioner is directed to ensure kVAh reading for all LT-Industrial and LT-commercial meters at the earliest so that kVAh based billing can be introduced for them too as has been done for HT consumers and submit the requisite information along with the Tariff Petition for FY 2023-24.</p> <p><b>Petitioner's Response in the Present Tariff Petition</b> The Electricity Department has been sanctioned 750356 Prepaid Smart meters under Revamped Distribution Sector Scheme (RDSS) as per the Sanction letter dated 10/10/2022.</p>	<p><b>Submission:</b> The Tender for Prepaid Smart meters was published on 21/01/2023 and date of opening of Tender was scheduled on 15/02/2023. However, the tender was cancelled on 18/05/2023 due to technical issues and re-floated on 14/06/2023. The tender was cancelled again as no bidders had quoted for the tender. The tender is refloated on 06/11/2023 and the technical opening of tender is on 27//11/2023. The timelines for installation of all Prepaid Smart Meters as per</p>



*Petition for True-up of FY 2022-23, APR for FY 2023-24, & ARR and Tariff for FY 2024-25*

S/No	Directives in Brief	Commission's Direction in the Tariff Order for FY 2023-24 dated 30 <sup>th</sup> March 2023	Compliance by the Electricity Department, Goa
		<p>The timelines for installation of all Pre-paid Smart meters is March, 2025. The kVAh based billing will be carried out for LT Commercial and LT Industrial after installation of the Smart Meters.</p> <p><b>Commission's Response</b> The Petitioner is directed to ensure kVAh reading for all LT-Industrial and LT-commercial consumers with contracted demand more than 20 kW at the earliest so that kVAh based billing can be introduced for them too as has been done for HT consumers and submit the requisite information along with the Tariff Petition for FY 2024-25.</p>	<p>scheme guidelines is March, 2025. The directives will be complied after installation of Smart meters.</p>



## 12 PRAYERS TO THE HON'BLE COMMISSION

### Prayer to the Hon'ble Commission

The Electricity Department, Government of Goa (EDG) respectfully prays to the Hon'ble Commission to:

- Accept and admit the petition for True-up of FY 2022-23, Annual Performance Review of FY 2023-24, Aggregate Revenue Requirement FY 2024-25, and Tariff proposal for FY 2024-25, which is in line with the principles laid by the Hon'ble Commission contained in MYT Regulations, 2021;
- Accept and admit the Tariff Formats attached in **Annexure-1** of this petition for the True-up of FY 2022-23, APR of FY 2023-24, ARR for FY 2024-25.
- Approve the total recovery and revenue gap for Final True-up of FY 2022-23, Annual Performance Review of FY 2023-24, ARR for FY 2024-25 and Tariff Proposal for FY 2024-25 and other claims as proposed by EDG;
- Approve the Revenue Gap for FY 2022-23 as Rs. 310.89 Cr as per True up, and the revenue gap as may be approved by the Hon'ble Commission during the process of finalising the True-Up petition;
- The revenue gap is proposed to be met through budgetary support by the Government of Goa. The letter for Budgetary Support have been submitted as **Annexure-2** to this Petition;
- Approve the Revenue Gap of Rs. 239.29 Cr for FY 2023-24 as per APR, and standalone Revenue Gap considering revenue from proposed tariff amounting to Rs. 618.98 Cr. for FY 2024-25 on provisional basis and the revenue gap as may be approved by the Hon'ble Commission during the process of finalising tariff petition;
- To consider the Tariff Design Philosophy and grant approval for proposed changes in Tariff Schedule (changes in applicability clauses), charges for services, miscellaneous charges and general terms & condition of the Tariff Order for FY 2024-25;
- Approve the revenue at the proposed tariff for FY 2024-25 and the Gap of Rs. 417.58 Cr. till FY 2024-25. The Revenue Gap of Rs. 417.58 Cr. is proposed to be bridged partially through tariff hike on the Consumers of LT Category, increase in the Tariff Slab for the Evening Peak Load Period (6:00 PM to 11:00 PM) from 120% to 140% of normal rate of energy charge (for HT/EHT Category of Consumers) and remaining through budgetary support. The letter for Budgetary Support shall be submitted after issuance of the same by Government of Goa;
- Approve the draft standard PPA for KUSUM-A scheme to be signed between EDG & Farmers/Solar Power Generator submitted in **Annexure-3**.



- Pass suitable orders with respect to True-up of FY 2022-23, APR for FY 2023-24, ARR for FY 2024-25, and Tariff Determination Proposal for FY 2024-25 for the expenses to be incurred by EDG for serving its consumers;
- Grant any other relief as the Hon'ble Commission may consider appropriate;
- The Petitioner craves leave of the Hon'ble Commission to allow further submission, addition and alteration to this petition as may be necessary from time to time;
- Condone any inadvertent omissions/errors/shortcomings and permit EDG to add/change/ modify/ alter this filing and make further submissions as may be required at a future date;
- To pass any other Order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.

The Petitioner declares that the subject matter of the petition has not been raised by the petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any order in relation thereto.

### **13 ANNEXURES.**

**Annexure 1: Tariff Formats**

**Annexure 2: Budgetary Support Letters**

**Annexure 3: PM KUSUM Model PPA**

**Annexure 4: Copy of Letter submitted to CAG**

**Annexure 5: KAPS 1&2 Arrear bill**

**Annexure 6: Request letter from IOCL (EV Stations)**

**Annexure 7: JERC Draft Regulations on Procurement of Renewable Energy**

**Annexure 8: Information of Railway consumers**

**Annexure 9: Energy Audit reports of FY 2022-23 and FY 2023-24 (Q1 & Q2) to BEE**

**Annexure 10: Data on Sub Divisions as Strategic Business Units (SBU)**

**Annexure 11: Collection of data based on consumer type.**