### Petition for Annual Performance Review for the year 2023-24

### Volume - 1

### Submission Text and Affidavit

#### Submitted to

## THE HON'BLE WEST BENGAL ELECTRICITY REGULATORY COMMISSION

by



CESC HOUSE
CHOWRINGHEE SQUARE
KOLKATA 700 001

APR 2023-24

### **DETAILED CHECKLIST FOR PETITION**

### A. PETITION FOR APR

SL. NO.	PARTICULARS	Yes/No/Not Applicable	Volume and Page No./Remarks
1,	Whether the petition is submitted as per Form – 1 (General headings for proceedings) vide regulation 2.5.1 WBERC (Conduct of Business) Regulations, 2013, as amended.	Yes	Volume 1, page 1
2.	Whether petition is submitted along with the requisite fees as per WBERC (Fees) Regulation, 2013 read with Office Order No. 512 dated 30.8.2017 and details thereof.	Yes	Rs. 7,43,930/ Kindly refer to UTR No. RTGS: ICICR52024121200305219/ SBIN0004204/WBERC Also, Requisite fee of Rs. 5000/-paid separately for kind condonation of delay in submission of the petition. Kindly refer to NEFT:000155007724/ SBIN0004204/WBERC
3.	Whether affidavit is submitted along with the petition in prescribed format vide Form-2 Regulation 2.6.1 of WBERC (Conduct of Business) Regulations, 2013, as amended.	Yes	Volume 1, page
4.	Whether one original with three copies of the petition type written or printed neatly and legibly on white paper are submitted and every page is consecutively numbered with volume number is clearly mentioned along with electronic version.	Yes	Complied
5.	Whether gist is submitted along with the petition:  APR / FPPCA Petitions: specifying the salient features of the petition, adjustment / refund claimed and inviting suggestions / objections from stakeholders.	Yes	Volume 2, page 236
6.	In case any part of transmission tariff is granted under CERC Sharing Regulation, Whether details thereof with a copy of relevant order of Hon'ble CERC have been submitted.	Not Applicable	
7.:	Whether copies of Perspective Plan as per following details are submitted (For MYT petition)  Capex Plan Capitalisation Schedule	Not Applicable	

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SL. NO.	<u>PARTICULARS</u>	Yes/No/Not Applicable	Volume and Page No./Remarks
	<ul> <li>Demand Forecast (DISCOM only)</li> <li>Power Purchase Plan (DISCOM only)</li> </ul>		
8.	Whether applicable forms duly filled in are submitted along with the petition as per details given at Annexure – 'A' attached.	Yes	Complied
9.	Whether Audited Financial Statements (with all notes & schedules) are submitted:  • For MYT – Last five years  • For APR – Concerned year	Yes	Volume 3, pages 1-260
10	Whether copies of Cost Audit Report, as submitted to Govt of India in prescribed proforma and with all annexures in accordance with Companies (Cost Records and Audit) Rules, 2014, is attached with the petition  For MYT – Last five years  For APR – Concerned year	Yes	Volume 10, pages 269-295
11	Whether separate reconciliation statement for the figures of petition not matching with the Audited Accounts is submitted as per Regulation 2.5.2.1(xvi) of WBERC Tariff Regulations, 2011 as amended	Yes	Fuel and power purchase costs are determined in terms of the Regulations of the Hon'ble Commission and as such are not extracted from the Audited Accounts. Auditors' certificates have been placed in Volume 3 where ever applicable.
			Also Kindly refer to the reconciliation statement placed in Volume 2, page 195
12	Statement giving full details of subsidy received and receivable, if any, the consumers to whom it is directed and the way in which such subsidy is proposed to be reflected in the proposed tariff applicable to these consumers.	Yes	Volume 3, Auditors' Certificate placed in Page 304
13	Plan to contain and reduce the losses in generation, transmission and distribution both short-term and long-term (with MYT Petition)	Not Applicable	



### Details of Forms to be submitted along with Tariff Petition / APR Petition in terms of regulation 2.5.2.2 of the WBERC Tariff Regulations

SI No.	Form Number	Description	Yes / No / Not Applicable	Volume No. / Page No.	Remarks
1	Form 1.1	Availability of Plant (Plant Availability Factor) Annually	Yes	Volume 2, page 2	
2	Form 1.1(a)	Availability of Unit (Unitwise Availability Factor) – Annually (Stationwise)	Yes	Volume 2, page 3	
3	Form 1.2	Plant Load Factor – Annually	Yes	Volume 2, page 4	
4	Form 1.2(a)	Unit wise Plant Load Factor — Annually (Stationwise)	Yes	Volume 2, page 5	
5	Form 1.3	Gross Energy available at Generator's Terminal for stabilised commercial operation (Stationwise)	Yes	Volume 2, pages 6-7	ï
6	Form 1.4(a)	Auxiliary Consumption for stabilised commercial operation (Stationwise)	Yes	Volume 2, pages 8-9	
7	Form 1.4(b)	Pumping Energy for Pumped Storage Project	Yes	Volume 2, page 10	
8	Form 1.5	Net Energy sent out for stabilised commercial operation (Stationwise)	Yes	Volume 2, pages 11-12	
9	Form 1.6(a)	Energy Purchased (Sourcewise)	Yes	Volume 2, pages 13-17	
10	Form 1.6(b)	Monthwise Non drawal of power from different sources of purchase due to low demand inspite of having availabilities at purchaser side	Yes	Volume 2, page 18	
11	Form 1.6(c)	Monthwise Generation Loss at different Generating Station	Yes	Volume 2, pages 19-20	
12	Form 1.7	T&D Loss %	Yes	Volume 2, page 21	
13	Form 1.8	Aggregate Technical & Commercial (AT&C) Loss	Yes	Volume 2, page 22	
14	Form 1.9	Energy Balance	Yes	Volume 2, page 23	
15	Form 1.9(a)	Energy received for Wheeling	Yes	Volume 2, page 24	
16	Form 1.9(b)	Energy sold to persons other than licensees or any consumers	Yes	Volume 2, pages 24-27	
17	Form 1.9(c)	Energy sold to other licensees	Yes	Volume 2, page	

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CESC LIMITED

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SI No.	Form Number	Description	Yes / No / Not Applicable	Volume No. / Page No.	Remarks
				28	
18	Form1.9(d)	Energy wheeled at Delivery Point	Yes	Volume 2, page 28	
19	Form 1.10(a)	rm 1.10(a) Quantum of Purchase of Power and rate thereof (Source wise vis-a-vis Station wise)		Volume 2, pages 29,31,33,35,38-41	
20	Form 1.10(b)	Power Purchase Cost Analysis (Source wise vis-a-vis Station wise)	Yes	Volume 2, pages 30,32,34,36-37	
21	Form 1.11	Cost of Fuel (Station wise)	Yes	Volume 2, pages 42-43	
23	Form 1.12	Expenditure — Generation of Electricity (Station Wise)	Yes	Volume 2, pages 101-105	
24	Form 1.13	Expenditure – Transmission of Energy	Yes	Volume 2, page 106	
25	Form 1.14	Average System Demand for Transmission Systems	Yes	Volume 2, page 107	
27	Form 1.15	Expenditure – Distribution of Energy	Yes	Volume 2, pages 108-109	
29	Form 1.16	Expenditure – Sale of Electricity	Yes	Volume 2, pages 110-111	
32	Form 1.17(a)	Water Charges: Generating (station wise)	Yes	Volume 2, page 113	
34	Form 1.17(b)	Interest on Working Capital	Yes	Volume 2, page 114	
36	Form 1.17(c)	Other finance charges	Yes	Volume 2, page 115	
37	Form 1.17(d)	Foreign Exchange Rate Variation (FERV) – Yearwise	Yes	Volume 2, page 116	
39	Form 1.17(e)	Statutory Charges	Yes	Volume 2, page 117	
42	Form 1.17(g)	Statement of Expenditure (major overhauling etc.) included in fixed Asset	Yes	Volume 2, page 118	
43	Form 1.17(h)	Break up of Employee Cost	Yes	Volume 2, pages 119-120	
44	Form 1.17(i)	Details of arrear against wage revision Yes Volume		Volume 2, page 121	
45	Form 1.17(j)	Yes		Volume 2, page 122	
47	Form 1.18	Original Cost of Fixed Assets	Yes	Volume 2, pages 123-126	
48	Form 1.18(a)	Original Cost of Works in Progress	Yes	Volume 2, page 127	
49	Form 1.18(b)	Intangible Assets KOLKATA	Yes	Volume 2, page 128	

SI No.	Form Number	Description	Yes / No / Not Applicable	Volume No. / Page No.	Remarks
50	Form 1.18 (c)(i)(ii)	Investments and income from Investments	Yes	Volume 2, page 129	
51	Form 1.18(d)	Decapitalised Asset	Yes	Volume 2, page 130	
52	Form 1.19(a)	Capital Expenditure for the year	Yes		
53	Form 1.9(b)	Overall Capital Expenditure Programme	Yes	Volume 2, pages 132-143	
54	Form 1.19(c)	Project Specifications	Yes	Volume 2, page 144	
56	Form 1.20(a)	Return on Equity	Yes	Volume 2, pages 145-147	
58	Form 1.20(b)	Normative Loan (Actual Loan + Equity in excess of 30% of Asset)	Yes	Volume 2, page 148	
59	Form 1.21	Special Allocation	Yes	Volume 2, page 149	
60	Form 1.22	Return of Equity	Yes	Volume 2, page 150	
62	Form 1.23	Permitted Incentive	Yes	Volume 2, pages 151-153	
63	Form 1.24	Benefits passed on to consumers	Yes	Volume 2, pages 154-156	
64	Form 1.25	Receipts from Sale of Energy	Yes	Volume 2, page 157	
65	Form 1.26	Income other than Sales of energy	Yes	Volume 2, pages 158-160	
66	Form 1.27	Wheeling Charge	Yes	Volume 2, page 161	
67	Form 1.28	Statement Showing Status of FCA/ FPPCA Claim	Yes	Volume 2, page 162	
68	Form A	Planned repairs and maintenance / forced outage / major repairs for generation plants (Station-wise vis-à-vis yearwise)	Yes	Volume 2, pages 163-168	
70	Form B	Details of Depreciation chargeable to revenue account for the year (Yearwise)	Yes	Volume 2, page 169	
72	Form C	Statement of Loans And Calculation of Interest Thereon for the year (Yearwise)	Yes	Volume 2, pages 170-182	
73	Form D	Details of Source Wise Fuel for Computation of Energy Charges	Yes	Volume 2, pages 84-85,88-89	
74	Form D (a)	Details of Coal sourced through	Yes	Volume 2, pages	

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SI No.	Form Number	Description	Yes / No / Not Applicable	Volume No. / Page No.	Remarks
		FSA		86,90	
75	Form D (b)	Details of Coal sourced from captive mines	Yes	Volume 2, pages 86,90	
76	Form D (c)	Details of Coal sourced through E-Auction	Yes	Volume 2, pages 86,90	
77	Form D (d)	Details of Imported Coal	Not Applicable		
78	Form D (e)	Details of coal from other sources	Yes	Volume 2, pages 87,90	
80	Form E(A)	Summarised Revenue Requirement - Generating Company (Station wise)	Yes	Volume 2, pages 183-188	
82	Form E(B)	Summarised Revenue Requirement – Distribution	Yes	Volume 2, pages 189-194	
84	Form E(T)	Summarised Revenue Requirement - Transmission	Yes	=	
87	Form 2.1	Annual Sales	Yes	Annex 2, Volume 2, page 197	
88	Form 2.1(a)	Seasonal Sales for Summer	Yes	Annex 2, Volume 2, page 197	
89	Form 2.1(b)	Seasonal Sales for Monsoon	Yes	Annex 2, Volume 2, page 197	4
90	Form 2.1(c)	Seasonal Sales for Winter	Yes	Annex 2, Volume 2, page 197	
91	Form 2.2	Consumer details for Ensuing year (Yearwise)	Yes	Annex 2, Volume 2, page 197	
92	Form 2.3	Annual Revenue at Current Rates (Yearwise for ensuing years)	Yes	Annex 2, Volume 2, page 197	Details of category wise
93	Form 2.3(a)	Seasonal Revenue at Current Rates for Summer (Yearwise for ensuing years)	Yes	Annex 2, Volume 2, page 197	seasonal sales and revenue statement at current rates
94	Form 2.3(b)	Seasonal Revenue at Current Rates for Monsoon (Yearwise for ensuing years)	Yes	Annex 2, Volume 2, page 197	for 2023-24 furnished in this petition.
95	Form 2.3 (c)	Seasonal Revenue at Current Rates for winter (Yearwise for ensuing years)	Yes	Annex 2, Volume 2, page 197	
96	Form 2.4	Low & Medium Voltage Supplies – Existing Rates	Yes	Annex 2, Volume 2, page 197	
97	Form 2.5	High and Extra Voltage Supplies  – Existing Tariff Structure	Yes	Annex 2, Volume 2, page 197	
98	Form 2.6	Category-wise Details of Existing Rates	Yes	Annex 2, Volume 2, page 197	
99	Form 2.7	Impact on fixed Charges, interruption Benefits, Rebates	Yes	Annex 2, Volume 2, page 197	

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SI No.	Form Number	Description	Yes / No / Not Applicable	Volume No. / Page No.	Remarks
		and Surcharges; Minimum Charges etc. on Revenue at Existing Tariff			
100	Form 2.7.1	Details of Annual Power Factor Rebate/ Surcharge on Revenue at existing tariff	Yes	Annex 2, Volume 2, page 197	
101	Form 2.7.2	Details of Annual Load Factor Rebate/ Surcharge on Revenue at existing tariff	Yes	Annex 2, Volume 2, page 197	
102	Form 2.7.3	Details of Annual TOD benefits at existing tariff	Yes	Annex 2, Volume 2, pages 198-200	
103	Form 2.8	Meter Rental (Existing)	Yes	Form 1.26 Annex 1, Volume 2, page 158	
104	Form 2.9	Existing broad financial term of supply	Yes	Volume 2, page 201	Terms and associated conditions of tariff
105	Form 3.1	Annual Revenue at Proposed Rates (Yearwise for ensuing years)	Not Applicable		ā
106	Form 3.1 (a)	Seasonal Revenue at Proposed Rates for Summer (Yearwise for ensuing years)	Not Applicable		
107	Form 3.1 (b)	Seasonal Revenue at Proposed Rates for Monsoon (Yearwise for ensuing years)	Not Applicable		
108	Form 3.1 (c)	Seasonal Revenue at Proposed Rates for Winter (Yearwise for ensuing years)	Not Applicable		For submission of APR petition
109	Form 3.2	Low & Medium Voltage Supplies – Proposed Tariff Structure for ensuing years (Yearwise)	Not Applicable		2023-24, these forms are not applicable;
110	Form 3.3	High Voltage Supplies – Proposed Tariff Structure for ensuing years (Yearwise)	Not Applicable		not being a tariff determination
111	Form 3.4	Category-wise Details of Proposed Rates for ensuing years (Yearwise)	Not Applicable		exercise.
112	Form 3.5	Impact of Fixed Charges, Interruption Benefits, rebates and Surcharges, Minimum Charges etc. on Revenue at Proposed Tariff (Yearwise for ensuing years)	Not Applicable		
113	Form 3.5.1	Details of Annual Power Factor Rebate/ Surcharge on Revenue	Not Applicable		

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SI No.	Form Number	Description	Yes / No / Not Applicable	Volume No. / Page No.	Remarks
		at Proposed tariff (Yearwise for ensuing years)			
114	Form 3.5.2	Details of Annual Load Factor Rebate/ Surcharge on Revenue at proposed tariff (Yearwise for ensuing years)	Not Applicable		E
115	Form 3.5.3	Details of Annual TOD benefits at Proposed Tariff (Yearwise for enduing years)	Not Applicable		-
116	Form 3.6	Meter Rental (Proposed)	Not Applicable		
117	Form 3.7	Proposed Broad Financial Term of Supply	Not Applicable		
118	Form 4 (i)	Input to the EHT System (400 kV, 220 kV, 132 kV and 66 kV)	Yes	Volume 2, page 202	
119	Form 4 (ii)	Delivery to 33 & 11 kV Distribution System from EHT System (400 kV, 220 kV, 132 kV and 66 kV)	Yes	Volume 2, page 203	
120	Form 4 (iii)	EHT Sales at 220 kV, 132 kV, 66 kV voltages	Yes	Volume 2, page 204	
121	Form 4 (iv)	Losses (400 kV, 220 kV, 132 kV & 66 kV)	Yes	Volume 2, page 205	
122	Form 4 (v)	Energy Delivered into 33 kV Distribution System at the Inter-connection Points of the EHT System & other sources of Generation	Yes	Volume 2, page 206	
123	Form 4 (vi)	HT sales at 33 kV	Yes	Volume 2, page 207	
124	Form 4 (vii)	Energy delivered from 33/20/11/6 kV Substations into 20 kV, 11 kV & 6 kV System	Yes	Volume 2, page 208	
125	Form 4 (viii)	Energy Delivered into 11 kV Distribution System at the Inter-connection Points of the EHT System and other sources of Generation	Yes	Volume 2, page 209	
126	Form 4 (ix)	HT Direct Sales at 20 kV, 11 kV, 6 kV & 3.3 kV	Yes	Volume 2, page 210	
127	Form 4 (x)	Energy Sold in the LT System	Yes Volume 2, page 211		
128	Form 4 (xi)	Losses at 33 kV and 11 kV	Yes	Volume 2, page 212	
129	Form 5 (i)	Voltage Fluctuation	Yes	Volume 2, page 217	
130	Form 5 (ii)	Frequency excursion KOLKATA	Yes	Volume 2, page 218	

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Si No.	Form Number	Description	Yes / No / Not Applicable	Volume No. / Page No.	Remarks
131	Form 5 (iii)	Abstract of Outages due to tripping of HT Feeders	Yes	Volume 2, pages 219	
132	Form 5 (iv)	Failure of Transformers	Yes	Volume 2, page 221	
133	Form 5 (v)	Major System Disturbance (Grid Disturbance)	Yes	Volume 2, page 222	
134	Form 5 (vi)	Electrical Accidents	Yes	Volume 2, page 225	
135	Form 5 (vii)	Release of Customer Bills	Yes	Volume 2, page 230	
136	Form 5 (viii)	Release of Service Connections	Yes	Volume 2, page 231	
137	Form 5 (ix)	Status of Metering	Yes	Volume 2, page 232	
138	Form 5 (x)	Status of Demand	Yes	Volume 2, page 233	
139	Annexure 6	Cash Flow Statement	Yes	Volume 2, page 235	
140	Annexure 10	Asset Register Summary	<b>.</b>	•	



## BEFORE THE HON'BLE WEST BENGAL ELECTRICITY REGULATORY COMMISSION, KOLKATA

FILE NO.

CASE NO.

### IN THE MATTER OF:

Application for Annual Performance Review for the year 2023 - 24 in terms of the Regulations of the Hon'ble West Bengal Electricity Regulatory Commission.

**AND** 

### IN THE MATTER OF:

CESC Limited CESC House Chowringhee Square, Kolkata 700 001

.....Petitioner



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- Budge Budge Generating Station received Digital Transformation Award for "Innovative (Automated operation of Unit 3 Cooling Tower Blow down valve)" at CII DX Operational Excellence Awards 2023
- Budge Budge Generating Station received 1st Runner up Award in the category of "Energy Intensive Group" at 16th
   CII Energy Conservation Awards (ENCON) 2022-23
- Budge Budge Generating Station received Gold Award for "outstanding achievement in environment improvement" at 14th Exceed Green Future Award 2023
- Budge Budge Generating Station received Winner Award for "Outstanding achievements in water management" at Global Water Awards 2023
- Budge Budge Generating Station received Gold Award at Apex India Quality Excellence Award 2023
- Budge Budge Generating Station received Winner Award for "Energy Efficient Unit" at CII National Awards for Excellence in Energy Management 2023
- o Budge Budge Generating Station received Winner award
- Eastern Region for "Best ESG Initiative Water
   Efficiency" at The Power-Gen ESG & Sustainability
   Awards 2023 by CEE

COMPANY SECRETARY
CESC LIMITED

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- Budge Budge Generating Station received Platinum Award in the category "Large Enterprise-Power Sector" at 17th ICC Environment Excellence Awards 2023
- Southern Generating Station received Gold Award in the category "Large Enterprise-Power Sector" at 17th ICC Environment Excellence Awards 2023
- Budge Budge Generating Station received Winner award for "Best National Water Efficient Plant of the Year" at 2nd National Power-Gen Water Awards 2024 by Council of Enviro Excellence
- Budge Budge Generating Station received Gold Award for "Water Stewardship" at Apex India Green Leaf Awards 2023
- Southern Generating Station received Gold Runner up Award at 5th ICC National Occupational Health and Safety Awards 2023
- CESC attained First Position Award at 11th Innovation with Impact Awards for Discoms, Organized by Indian Chamber of Commerce
- CESC received Runner-up Award for "Best Performing Distribution Company" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)
- CESC received Runner-up Award for "Best Distribution Company to Promote Consumer Awareness" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)
- CESC received Winner Award for "Remote Job surveillance" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)
- o CESC received Winner Award for "Design and Implementation of Online Remote Monitoring Scheme" at

CO KAMAL AURIAR PAUL 4 REGIN NU. 2700/04

Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)

- CESC received Winner award for "AASTHA The CESC Voice Assistant" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)
- CESC received Winner award for "Loss reduction at Pilkhana" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)
- CESC received Winner award for India's Best Utility (Overall) – Power Generation, Transmission & Distribution at 16th ENERTIA Awards 2023, Organized by ENERTIA Foundation
- CESC received Platinum award for EKLAVYA CESC
   Skill Academy Project at Fame National Award 2023
   Organized by Foundation for Mass Accelerated Mass
   Empowerment
- CESC received award for Role Model in HR Excellence at 14th CII National HR Excellence Award 2023-24,
   Organized by Confederation of Indian Industries

### Photographs

- Consumer Service Initiatives
- E-initiatives to connect to consumers
- Communications to consumers regarding safety measures during monsoon season
- Approach towards curbing theft of electricity: Detection,
   Anti-theft Drives, Awareness Campaign





## Application for Annual Performance Review for the year 2023-24

In terms of the applicable Regulations specified by the Hon'ble West Bengal Electricity Regulatory Commission

The humble petition of the Petitioner above-named

MOST RESPECTFULLY SHEWETH:

#### 1. Preamble

- 1.1. The Petitioner herein, CESC Limited (hereinafter referred to as "CESC" or the "Company") is a Company registered under the Companies Act, 1956 having its Registered Office at CESC House, Chowringhee Square, Kolkata 700001.
- 1.2. CESC is a distribution licensee in terms of the first proviso to Section 14 of the Electricity Act, 2003. The Company is also a generating company within the meaning of Section 2 (28) of the Electricity Act, 2003.
- 1.3. The Hon'ble West Bengal Electricity Regulatory Commission (hereinafter referred to as "Hon'ble Commission") determines the tariff of CESC in terms of the Electricity Act, 2003 and the Regulations prescribed thereunder by the Hon'ble Commission.
- 1.4. CESC Limited had submitted the Petition for determination of Annual Revenue Requirement ("ARR") and tariff for the years 2023-24, 2024-



25 and 2025-26 under the eighth control period on 27 January 2023 and thereafter the Company had also submitted a Supplementary Petition on 13 June 2023, in accordance with the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, including the amendments specified thereafter (hereinafter referred to as the "Tariff Regulations") and the Hon'ble Commission issued the Multi Year Tariff Order (hereinafter referred to as "MYT Order") for 2023-24 and 2024-25 on 3 September 2024 in Case No. TP-102/22-23, in which, the Hon'ble Commission has also approved the ARR for 2023-24, 2024-25 and 2025-26. Now, in compliance with the mandate of Regulation 2.6.1 read with Regulation 2.6.7 of the Tariff Regulations, CESC Limited is making the present application for Annual Performance Review (hereinafter referred to as "APR Petition") of the concerned year with fuel and power purchase forms with necessary details, statutory audited data and a copy of the audited Annual Accounts for 2023-24. This APR Petition may kindly be considered for all details.

1.5. CESC has submitted the Petition for approval of FPPCA for the year 2023-24 vide Communication No. SEC:1185/2024-25/221 dated 17 October 2024, in 9 Volumes (hereinafter referred to as the "FPPCA Petition"). However, computations relating to FPPCA Petition for 2023-24 are being submitted along with this instant Petition with all necessary annexures and this Petition may be considered for ease of reference of the Hon'ble Commission. Needless to mention that, nothing has been omitted from the attachments, in any respect. It is respectfully submitted that the Hon'ble Commission is yet to admit the FPPCA Petition dated 17.10.2024 for 2023-24.



1.6. During 2023-24, the year under consideration for the present APR Petition, the Company has recovered revenue in terms of and as directed in the MYT Order of the Hon'ble Commission dated 1 August 2022 in Case No. TP-96/20-21 and also in terms of the Tariff Order for 2022-23 dated 11 December 2023.

### 2. Overview of CESC's Licensed Operations

- 2.1. CESC is in the business of electricity distribution for over 126 years. It is the first Company to commence public power supply in India, which started power distribution in India only 17 years after New York. CESC's licensed area presently extends over 567 sq. km, covering Kolkata, parts of North and South 24 Parganas, Howrah and Hooghly districts. A power map of the Company has been placed in "Attachment 1" in Volume 1 of this Petition.
- 2.2. Presently, the Company serves more than 37 lakh consumers in its licensed area. Maximum demand of 2728 MW recorded in April 2024 is the highest demand ever met by CESC system. Peak demand surpassed 2600 MW on quite a few occasions in summer of 2023-24. Meeting the consumer demand had become a critical challenge under these circumstances and consumer demand, at times, tending to be unusual, as demonstrated in the recent past. Besides, consumers' expectations from the licensee are also changing with time. Hence, maintaining and improving the service quality has emerged as the paramount determinant of consumer satisfaction.



### 3. Factors affecting CESC's licensed business

#### 3.1. Overview

3.1.1. Regulated licensees in India are statutorily required to provide critical services, often under hostile circumstances. They need to be able to finance their ongoing operations including essential repairs and maintenance. In case commensurate funds to finance the business activities are not available/ delayed, there is a negative impact both on the Company's finances as well as its ability to service its customers.

### 3.2. Risks of Distribution Business

- 3.2.1. Being the link between the consumers and utilities, Distribution is the most critical segment of the electricity business. The National Electricity Policy observes, "Distribution is the most critical segment of the electricity business chain". Experts agree that distribution business is beset with problems of high and ever-increasing consumer expectations necessitating huge investments to upgrade continuously, risks / challenges on combatting the menace of power theft, uncertainty of recovery of investment and regulatory risk.
- 3.2.2. Though the Electricity Act, 2003 bought about major reforms in the power sector, still commercial viability of the sector looks like a distant dream. This is also echoed by NITI Aayog in the Appraisal Document of Twelfth Five Year Plan 2012-17 "The main issue affecting the power sector is the financial viability of the distribution companies, or discoms. The tariffs awarded by electricity regulatory



commissions have not been sufficient to recover even the cost of supply. In fact, the gap between average revenue and average cost is widening over time." Covid 19 pandemic even worsened the situation and According to a report published by NITI Aayog in August 2021, "The pandemic accelerated the discoms' outstanding dues to ₹ 1.39 lakh crore as of October 2020, breaching the pre-UDAY peak of ₹ 1.3 lakh crore in 2015. Dues to generators increased 34.4 percent year-on-year to more than one trillion rupees as of October 2020." A matrix showing comparative risk analysis supporting this contention is placed in "Attachment 2" in Volume 1 of this Petition.

- 3.2.3. Accumulated loss and debt of electricity distribution sector, as reported time and again by the Government of India, highlight the plight of electricity distribution sector which constrains the ability of the licensees to invest in modernisation and technological upgradation, essential for controlling aggregate technical and commercial losses (AT&C losses) of the nation the core problem with the Indian utilities. As on 2022-23, accumulated losses for distribution licensees in India stands at Rs. 6,47,913 Crores and total outstanding debt is Rs. 6,84,379 Crores as per the PFC Report on Performance of Power Utilities for 2022-23.
- 3.2.4. The major critical issues plaguing the distribution sector includes accumulated losses of discoms, absence of cost-reflective tariff leading to under-recovery of fixed costs, poor operational performance of discoms etc. Poor financial condition of distribution licensees is affecting financial condition of electricity generation sector and banking sector in turn. There is about Rs. 67819 crores



of total dues payments of generating companies from distribution licensees as on December 2024, as per the Praapti portal of the Ministry of Power.

- 3.2.5. It is worthwhile to mention that the Appellate Tribunal of Electricity (APTEL) has passed a suo-motu Order on 11 November 2011 in OP-1 of 2011 necessitating regular and timely issue of tariff and associated true-up Orders by the State Electricity Regulatory Commissions ensuring cost recovery of distribution licensees in adequate manner. However, the situation is not encouraging as per the Compliance Report of the Forum of Regulators dated 21 July 2023. As per July 2019 research report of CRISIL, post implementation of Ujwal Discom Assurance Yojana (UDAY), the desired improvement in performance of the distribution licensees has not been achieved primarily due to irregular / untimely revision in tariff.
- 3.2.6. As per International Energy Agency (IEA), the Indian energy sector will require an investment upwards of 3.6 trillion US dollars between 2015 and 2040. Funds will be allocated to the sector that minimizes risk for the given return. Hence, ensuring a time-bound recovery mechanism would make the power sector more attractive to the investors.
- 3.2.7. Another important aspect relating to the distribution business warrants mention. It is the statutory obligation of the distribution licensees to provide universal service. They must, at any cost, carry on supplying power to each existing consumer, a large proportion of whom belongs to very low consumption segment. In the year 2023-





24, about 19.85 lakhs of consumers of CESC accounted for around 928 MU sales – a meagre average sale of around 39 units a month per consumer. About 55% of consumers are in this category and account for about 8% of the units sold. Yet all costs relating to capital expenditure, breakdown service, meter reading, billing and collection, network surveillance, overall administration etc. have to be incurred for meeting the universal service obligation cast on CESC. Moreover, the cost associated with serving these small consumers is relatively higher in most cases. In this context, it may be pertinent to note that the National Electricity Policy observes, "..... meeting the target of providing universal access is a daunting task requiring significant addition to generation capacity and expansion of the transmission and distribution network." Unfortunately, all costs relating to providing service are on the rise, driven by sustained inflationary pressure.

3.2.8. Added to this onerous obligation of universal service, the distribution licensees in the country are required to combat the social menace of power theft. Unfortunately power pilferers have no qualms about their offences. On the contrary, these very persons turn aggressive and violent when the licensees attempt to prevent power theft. Various submissions made before the Hon'ble Commission from time to time stands as testimony to the fact that CESC operates its theft control operation in a hostile environment often involving physical violence against the Company's employees. Recovery of accumulated dues from the Government Institutions is also a critical

issue.



3.2.9. In spite of the above challenges, CESC has been able to cater to the demands in its licensed area as well as ensured reliability through uninterrupted supply to its consumers. There is, however, an over-arching need for settlement of its past tariff dues, as an enabler for continuity of its customer-centric services and initiatives.

### 3.3. Macroeconomic factors affecting power sector

3.3.1. Due to poor financial condition, the power sector is a major contributor of the Non-Performing Assets (NPAs). Unfortunately, due to this factor, availability of fresh loan became dearer for the power sector. According to a report published in March 2018 by the Parliamentary Standing Committee on Energy, Ministry of Power (MoP), of the total advances of Rs. 4,82,965 crore provided to electricity generation sector, around 19% of the outstanding advances are under stress. This may further rise due to falling electricity demand as being experienced over last few months in the country.

While CESC has endured the inflationary pressures well in the past through sustained performance improvement, the same impacted the Company adversely.





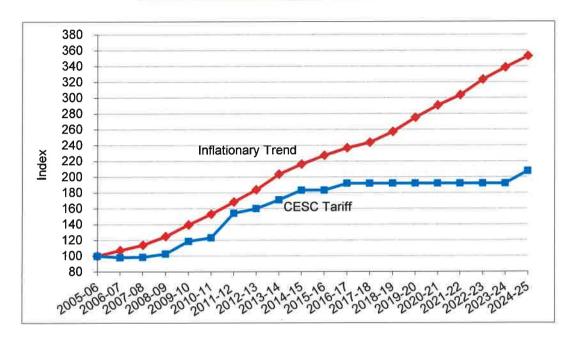


Chart: 3.1 Movement of Consumer Price Index (CPI)

CPI considered at September every year (source: Labour Bureau, Gol).

3.3.2. Efficiency measures can contain costs only up to a certain extent. Curtailment of necessary expenditure is bound to manifest itself as service inadequacies and eventually goes against the interest of the consumers. It may kindly be appreciated that maintaining its current level of activities is a critical challenge for CESC. Considering involvement of several factors and with a high degree of uncertainty prevailing in this sector, there is high financial risk in future.

### 3.4. Regulatory uncertainty

3.4.1. Given this state of affairs, it is therefore of vital importance, to safeguard the sustainability of the Company's operations in the interest of its consumers in general and particularly the smaller



segment thereof. All investors / lenders would like to weigh the risk against return and look for suitable incentive schemes on good performance before putting their funds at stake. Unless revenue sufficiency is predictable to meet costs and it provides expected return commensurate with the risk of distribution business, confidence of the stakeholders is bound to erode, the necessary fallout of which will manifest through absence of investment in the sector. Needless to mention that such an eventuality will not only be detrimental for the sector but also have significant repercussions for the State as a whole, particularly when the State is planning to progress along the path of resurgence.

- 3.4.2. The Electricity Act, 2003 seeks to promote investment in the power sector and it also aims at encouraging private sector participation. Electricity industry is highly capital intensive having long gestation period. This fact has been acknowledged in the National Electricity Policy. The same guiding policy also recognises the need for creation of adequate reserve capacity margin through suitable investment.
- 3.4.3. Private sector participation in investment is not likely to be forthcoming unless regulatory uncertainties are considerably mitigated. It is submitted that earlier attempts before promulgation of the Electricity Act, 2003, to promote investment and invite private sector participation were not successful principally because of the investors' risk perception. Recent developments have only accentuated risk perception of the sector as a whole.

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- 3.4.4. Regulated licensees in this country are statutorily required to provide critical services, often under hostile circumstances. They need to be able to finance their ongoing operations including essential repairs and maintenance. Therefore, the Company hopes that in view of its consistent high performance, the submissions / prayers as contained in this Petition will be favourably considered.
- 3.4.5. Securing optimum investment and recovery of costs in the sector and ensuring financial viability is relevant in the context of the developments that took place in the legal regime pertaining to coal in the recent past, which is of great significance for the generation sector (71% of generation in India is coal based). Around 78% of coal produced in India is consumed for power generation.
- 3.4.6. CESC has been apprising the Hon'ble Commission of all relevant developments pertaining to coal, including captive mine, from time to time. Detailed chronology of events leading to allocation of the captive coal mine at Sarisatolli, emergence of this mine as the primary and least-cost source for CESC's generating units, subsequent de-allocation as well as securing back of the mine through e-auction, issues and factors affecting mining operations presently are already in the records of the Hon'ble Commission and are not repeated herein to avoid prolixity. The Company craves leave to rely upon the same, whenever necessary. The risk/ cost of coal procurement has indisputably enhanced to a great extent, which is affecting financial viability and investment in the sector.





### 4. Supply Scenario

### 4.1. Demand on CESC system

- 4.1.1. CESC system has been steadily witnessing significant growth in peak demand. Maximum demand reached 2728 MW in April 2024, which was the highest demand ever met by CESC system. The following chart reflects the steady increase in peak demand in CESC licensed area over the last few years. Catering to such a high demand profile calls for development and regular maintenance of commensurate network infrastructure. The Company therefore continues to make substantial investments to ensure quality service and reliable power supply to the consumers through upgradation of both network and technology.
- 4.1.2. Growth in demand within CESC system over the years is presented in the following chart.





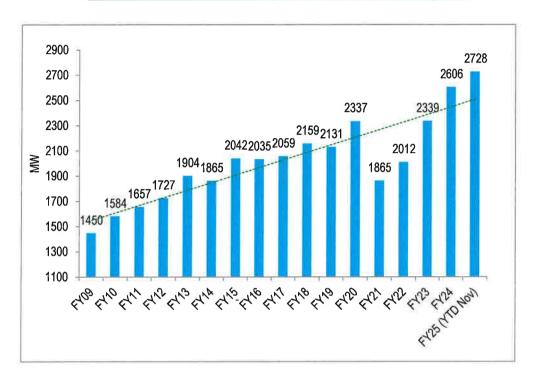


Chart: 4.1 Movement of Maximum Demand of CESC System

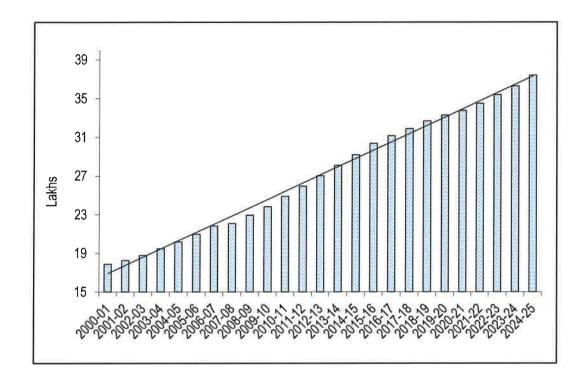
Maximum Demand showing increasing trend post Covid-19.

4.1.3. Vertical growth is taking place in and around the city. Consumer number was about 36.3 lakhs by the end of the year 2023-24 from around 18 lakhs in 2000-01. Lower end consumer segments have registered substantial growth in a regular manner. All these necessitate large scale network expansion to cater to the growing needs of the city based system.





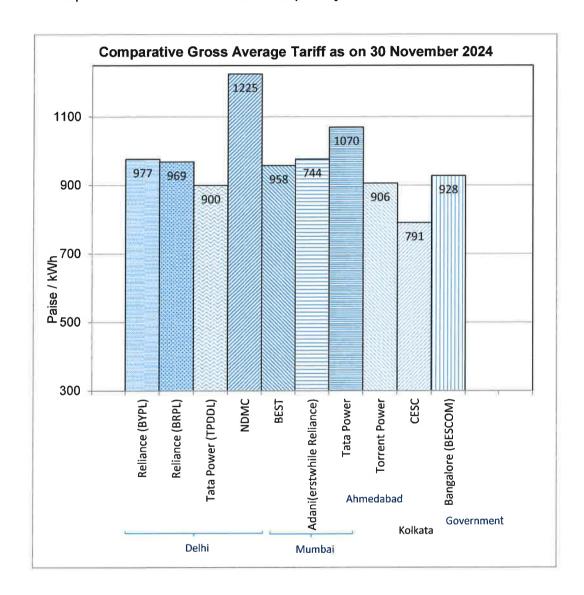
**Chart: 4.2 Movement of Consumer Numbers** 



- 4.1.4. The Hon'ble Commission is kindly aware that for fulfilment of such a high demand in the licensed area, the Company depends on both long term and short term power sources. Accordingly, CESC system requires augmentation of its distribution backbone and also creation of provisions for bringing in power from the sources. As there is little possibility of renewable generation within the licensed area, the requirement of bringing power from outside will also increase in foreseeable future. This will necessitate creation of new network or strengthening of existing network for wheeling of such power into CESC system.
- 4.1.5. In this context, it is also worth mentioning that gross average electricity tariff of CESC is lower than tariff prevailing in the major metropolitan cities of Mumbai, Delhi and Ahmedabad, as can be



evidenced in the chart below. But, to ensure energy security, reliability and to sustain improved operational performance, it is imperative to enhance tariff adequately.



### 4.2. Operations profile

4.2.1. CESC, as stated hereinbefore, is also in the business of owning, operating and maintaining its generating stations. The licensed distribution business of the Company has been procuring power

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generated by the generating stations of its generation business in terms of the Orders issued by the Hon'ble Commission from time to time and the Minutes of Meeting signed between the generation and distribution divisions of the Company. The Company obtains power on long term basis from its generating stations and also from Haldia Energy Limited ("HEL"), under an approved power purchase agreement and in terms of applicable Regulations / Orders of the Hon'ble Commission as relevant, details of which are placed in this Petition. The Company needs to resort to power procurement from various sources to cater to the overall system demand. It also procures electricity from cogeneration and renewable sources in terms of the applicable Regulations of the Hon'ble Commission.

- 4.2.2. Electricity is transported to the load centres for transformation to 33 kV through EHV network spread across the licensed area. There are sub-stations / receiving stations where voltage level is brought down from 220 / 132 kV and 132 / 33 kV. Total transformation capacity at sub-station / receiving station is 4977 MVA as on March 2024. Eastern Railway is the only consumer connected at 132 kV in CESC System. There are a few consumers served at 33 kV directly from EHV Substations via 33 kV feeders. Voltage transformation to 11 / 6 kV is carried out in distribution stations, which are fed from 33 kV feeders. From Distribution Stations, 11 / 6 kV feeders emanate to feed 11 kV and 6 kV (HT) consumers as well as for transformation at 400 / 230 V via Distribution Transformers (DTRs).
- 4.2.3. There are 1778 consumers, supplied at 11 / 6 kV. CESC also has a few consumers supplied at 20 kV and 3.3 kV due to its past legacies.

  Thereafter, electricity is transported to the local distribution centres



where it is transformed to 400 V / 230 V through DTRs. 400 / 230 V (MV / LV) consumers are supplied through MV feeders emanating from distribution transformers. Millions of consumers are supplied at these voltages. There are 9085 DTRs (including Package Substations) in CESC's licensed area with total transformation capacity of 3211 MVA.

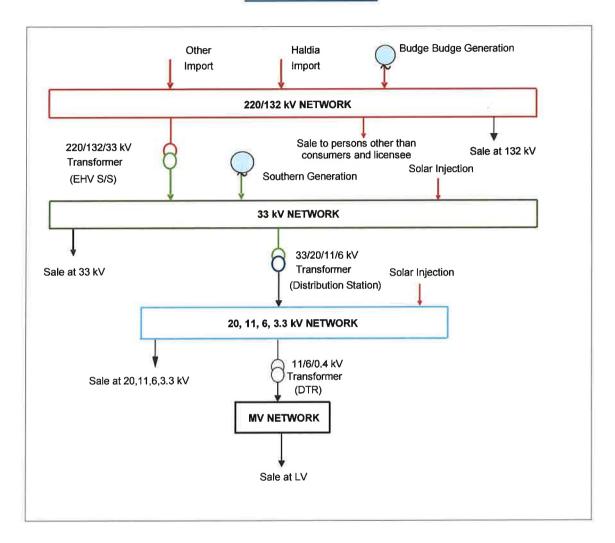
4.2.4. A schematic diagram showing different voltage levels of CESC's distribution network is presented below.





Chart: 4.2 Schematic Diagram of Different Voltage Levels in CESC's

Distribution Network



4.2.5. Capacity of substations at load centres and distribution network for supply to the consumers at various voltages as existing at the end of 2023-24 is given in the following table. In the year 2023-24, 16 MVA transformation capacity has been added at substations, 78 MVA at distribution transformers level in the network and total network length increased by 273 ckt. Km at HV and MV level.





Table 4.1 Distribution Capacity of CESC Limited as on 31.03.2024

Voltage Level	Transformation Capacity (MVA)
220 / 132 / 33 kV	2000
132 / 33 kV	2977
33 / 11 / 20 / 6 kV	3960
11 / 6 / 0.4 kV	3211
Voltage Level	Network Length (ckt. km)
220 kV	269
132 kV	399
33 kV	1707
20 / 11 / 6 / 3.3 kV	7313
400 V	14238

- 4.2.6. Over the years, stable power supply to the licensed area of the Company, has made it free from shedding of load due to non-availability of electricity. This has been made possible with reliable availability from the generation sources as well as procurement from external agencies, adequate augmentation to the network and improved maintenance regime. These performance parameters have been dealt elaborately in subsequent paragraphs.
- 4.2.7. Due to its past legacies, CESC system continues to have some peculiar characteristics needing specialised knowledge and equipment, which are:

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- Primary high voltage distribution system largely at 6 kV instead of 11 kV, with consequent higher technical losses.
- Continuity of supplies at voltage levels of 20 kV and 3.3 kV.
- 4.2.8. Like every metropolitan city, with burgeoning population, space continues to be a major constraint and a challenge from finding the space for meter installation, space for laying cables to network capacity augmentation. Incidences of other public utilities damaging cables of CESC in the course of their activities is not uncommon in the city where power cables, telephone cables, water mains etc. are all struggling for the restricted city space.
- 4.2.9. The Company strives to provide service to each and every consumer in this sensitive urban environment. Right of Way (RoW) for laying power lines as well as availability of suitable plots of land for establishing substations or for placing the transformers in highly developed and congested urban areas in the licensed area of CESC is also a serious concern. The Company always puts every endeavour to create more capacity in its existing substations.

### 5. Distribution Loss

5.1. Distribution is the most risk prone segment and weakest link of the entire value chain of power sector, which has also been recognized in the National Electricity Policy. Apart from meeting high consumer expectations in terms of services provided and universal service obligation, the most challenging task of a distribution licensee is containing the losses within the limits in the system.



5.2. Losses arise both as technical losses due to laws of physics and also as unauthorized consumption by some consumers of the distribution licensee (commercial losses). There is no management inaction on these issues and in spite of best efforts from the Company's side, containing distribution loss beyond a threshold is outside the control of the distribution licensee under most circumstances. All forms of losses have a direct impact on the Company's performance and profitability.

# 5.3. Technical factors contributing to distribution loss in CESC's distribution system

- CESC has an embedded network of extra high voltage (EHV) 5.3.1. system comprising 132 kV and 220 kV lines in its distribution network, part of which is beyond the licensed area. Therefore, distribution loss of CESC includes technical loss incurred in this EHV network also and in terms of the Tariff Regulations, the Company is entitled for additional network loss. Such loss has further accentuated with new sources coming up at a considerable distance from the load centres and outside the licensed area, increased RPO requirement necessatating bringing renewable energy from outside and decreasing contribution from load centre based generating stations on account of environment, vintage and other issues, already on the records of the Hon'ble Commission. Unlike most other licensees, CESC operates its primary distribution voltage level at 6 kV instead of 11 kV which also results in higher technical losses.
- 5.3.2. In case of CESC, the task of containing the distribution losses within acceptable limit is increasingly becoming challenging as the ratio of



HT to LT sales is reducing over the years, from over 51:49 in the year 1993-94 to about 29:71 in the year 2023-24. It is a well-known fact that higher the proportion of low voltage sales, the higher would be the technical component of distribution loss. This change in the sales ratio is totally beyond the control of any licensee and depends entirely on the pattern of electricity demand of the consumers. The following chart depicts the declining trend in proportion of HT sales.

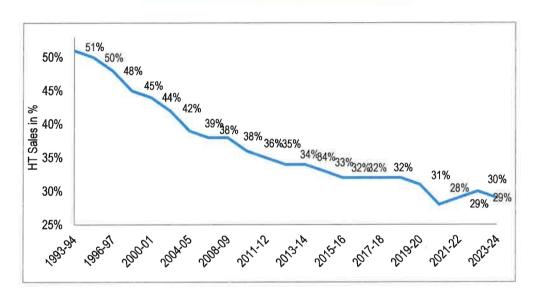


Chart: 5.1 HT Sales vis-à-vis Overall Sales

5.3.3. Apart from availing power from the generating stations in the licensed area, additional units required to be procured from external sources is available only at 220 / 132 kV, often at a distance from the load centre and outside the licensed area. The biggest supplier of long term power, Budge Budge Generating Station (750 MW), is located at the periphery of CESC's licensed area. As the Hon'ble Commission is kindly aware, power from the third unit of 250 MW at Budge Budge Generating Station is being evacuated through a long





90 km 220 kV line (commissioned a few years back), resulting in additional line loss. Power from the second largest source, the 600 MW station of HEL, is available at Subhasgram and needs to be conveyed to serve the city through a long distance. With sources at a considerable distance from the load centres and decreasing contribution from load centre based generating stations on account of environment, vintage and other issues, such losses has further accentuated.

- Other generating stations serving the licensed business are bussed at 33 kV and distributed locally. Dispatch from Southern Generating Station also operates on a protocol in the best interest of the consumers. Cessation of generation from Titagarh has further reduced load centre generation.
  - 5.4. Theft of electricity: A major concern and an uncontrollable factor contributing to distribution losses
- As a primary reason of commercial loss, theft remains a major concern for the distribution licensees in the country. CESC's area of supply is not immune from this social menace which is beyond the control of the Company without administrative and judicial deterrents.
- 5.4.2. Theft has been observed to be perpetrated by consumers of CESC as well as people who are not authorised consumers of CESC.

  Pilferers continuously engage into various innovative methods defeat the sincerest efforts of the Company to ensure stoppage of illegal use of electricity. There is a serious aspect of theft /



unauthorized use of electricity. These activities lead to danger of severe electrical accidents even leading to loss of human life and property. Since these means are undertaken in densely populated areas, the risks are manifold and public lives in these areas are prone to huge danger for the benefit of a few miscreants.

- 5.4.3. There has been no management inaction on the part of CESC. All possible actions legally available to CESC have been explored. Containing losses at the present level has become a challenge. Responsibility of maintaining law and order and preventing theft does not rest on the licensee. It is apprehended that without suitable administrative and judicial deterrents, it is becoming difficult for CESC to control the menace.
- 5.4.4. In this respect the Company would like to highlight some related figures, which speak for itself. While the Company is continuously pursuing its activities, the administrative action is not commensurate to curbe the menace.

Year	No. of meters checked	No. of hooking removed	No. of FIRs lodged	No. of court cases registered	No. of arrests made
2017-18	721370	130074	6965	49	43
2018-19	884315	115720	6254	59	56
2019-20	782723	94198	4521	60	53
2020-21	274861	14538	1670	42	19



Year	No. of meters checked	No. of hooking removed	No. of FIRs lodged	No. of court cases registered	No. of arrests made
2021-22	273873	17934	1987	36	36
2022-23	535010	8871	2504	60	39
2023-24	584997	4280	2502	55	58

## 5.5. Actions taken for technical loss management

The following actions are taken on appropriate occasions for controlling technical distribution losses.

- 5.5.1. Network Upgradation: Regular investments are made for capacity creation in order to meet the system demand, to manage technical loss effectively, and to improve reliability of supply. The Company is proactive in upgradation of 6 kV system to 11 kV and numerous activities are initiated to enhance such conversion. This programme of conversion at different load centres is also kept consistent with consumers' upgradation plan and benefits commensurate with investment plan
- 5.5.2. Installation of Automatic Power Factor Controller (APFC):
  - CESC is installing power factor controllers at appropriate places in the distribution network since 2016-17. Generally, the nearer





such power factor controller is placed in the network to the load centre, the better is the performance. Post assessment, management of technical loss at upstream network has been effective at upstream network of the transformer.

## 5.5.3. Network management:

 Supervisory Control and Data Acquisition (SCADA) and Distribution Management System (DMS) are in place to monitor power flow on real time basis and take corrective actions like load balancing etc.

#### 5.5.4. Condition Monitoring:

Regular health monitoring of the assets at EHV, 33 kV and 11/6 kV is being done using suitable tools to optimise performance.
 The important measures for this purpose are Dissolved Gas Analysis (DGA) for transformers and Partial Discharge detection for switchgears. Thermographic scanning at outdoor yard is done for hotspot detection.

#### 5.5.5. Use of coaxial cable in LV distribution network

 In loss prone pockets, over the period, even LT AB cables have been abused either by rupturing the insulation in the mid span or accessing the live parts from the joints for hooking / tapping. In order to combat such kind of theft of electricity, coaxial cables are now being used because of its inherent construction which will



result in a cable fault if such attempts are being made by the pilferers.

#### 5.5.6. Service cut-out installation

 The Company is replacing re-wireable fuse cut-outs at the service termination with MCBs / MCCBs inside an enclosure with special types of seals to prevent unauthorized access to the service parts and to ensure safety.

# 5.5.7. Bus bar Protecting Paint

 In pilfer-prone areas, there is propensity to steal electricity by direct hooking from busbars of pillar boxes. Till 2023-24, CESC has applied busbar protecting paint in about 958 pillar boxes/ Coaxial junction boxes to prevent theft of electricity.

### 5.5.8. Equipment installation to prevent pilferage and over drawal

 CESC has designed and developed an in-house and innovative service termination equipment namely "Pilfer Resistant and Pilfer Evident Service Unit for LV and MV installation with Overload and Short-circuit Protection Unit" in replacement of conventional cutouts in theft-prone areas.

### 5.6. Energy Audit

 Loss prone areas are being identified through energy audit at LV and MV level of distribution transformers. All the distribution transformers are retrofitted with metering arrangement.

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Distribution pillar boxes are being metered for further investigation in the theft prone localities. Intensive actions are being undertaken in accordance with the law. However, the sensitive nature of most of these areas precludes administrative support, as actions taken in such areas often escalate into severe law and order issues. Voluminous documented evidences exist in this regard and quite a number of them are already on the records of the Hon'ble Commission. Energy audit helps to embark into processes that are detailed below and each of which helps to bring down the losses.

# 5.7. Actions taken for commercial losses containment

#### 5.7.1. Metering

- <u>Statistical Analysis System</u>: CESC has developed a system for continuous monitoring / control to facilitate better surveillance practices on all categories of customers on the basis of consumption pattern and take appropriate measures.
- Meter Board Renovation: Old dilapidated meter boards are being replaced with new type of renovated meter boards on regular basis. Jumbled-up wiring in old meter boards causes frequent service faults, loose connection, short circuit etc. Detection of pilferage become difficult in jumbled-up wiring in old meter boards.
- Metered supply has been provided to those who otherwise resort to unauthorised supply of electricity by means of theft. In 2023-



24, 16307 new metered connections were given at different pilfer prone areas.

- Meters are tested in the in-house laboratory to identify defective and faulty meters. The meter testing laboratory in the Testing Department of CESC is accredited by NABL, Department of Science and Technology, Government of India.
- To promote pre-paid metering facility amongst consumers, CESC has taken initiatives as directed by Hon'ble Commission. However, it is experienced that the consumers in general are not opting for pre-paid meters and the Company has pre-paid meters lying in stock. As guided by the Hon'ble Commission, the Company has introduced various other options to its consumers for payment of electricity bills. These payment options are quite popular and frequently used by the consumers.

# 5.7.2. Smart Street Light Management System :

 Metering arrangement is provided for unmetered street light services through installation of "Smart Street Light Management System" having intelligent meter-cum-controller unit tailor-made for specific requirement of CESC. This unit also has an Automatic Meter Reading (AMR) and Advanced Metering Infrastructure (AMI) facility, self- protecting feature against overload and short circuit enabled with GSM and GPRS communictaion technology.





## 5.7.3. Public Awareness Programme:

Extensive public awareness campaigns are undertaken through print and electronic media including the Company's website. Camps are organised at the identified theft prone pockets jointly with local administration, Police authority, Fire Brigade and involving inhabitants, on the damaging effect of theft of electricity like safety and fire hazards etc. Regular visits to schools, distribution of leaflets, putting up posters, mobile announcements are made to instil awareness against this social menace.

#### 5.7.4. Continuous Surveillance and 24 x 7 Call Centre

- Intense level of activities are carried out in meter checking, surprise inspections, removal of hookings, vigilance, filing of FIRs, following up cases in legal forums etc. Regular round the clock surveillance of all industrial and high-end commercial consumers are carried out within stipulated period, with priorities given to cases where unusual change of consumption pattern is observed as per IT data base. Regular follow-up of the cases is done where unmetered consumption charges have not been paid in order to check whether the accused consumers are getting supply of electricity by any unauthorised means.
- Apart from handling cases of supply breakdowns and other supply related complaints of LT consumers, the Call Centre also works as a channel for theft reporting. Power theft can also be reported through the website of the Company (www.cesc.co.in) as well as through WhatsApp.



# 5.7.5. Loss control cell – A dedicated team and IT enabled system

 Loss Control Cell (LCC) has grown to be a full-fledged department, armed with exclusive software named System for LCC Information Management (SLIM).

# 5.7.6. Smart Energy Management System

Activities under this covers:

- Recording of total energy consumed in different parts of the system under audit.
- Energy Audit of whole / part of own consumption to initiate demand side management for flattening the system load curve, thereby reducing the import of costly peak power.

#### 5.7.7. Distribution Zone formation:

To reduce loss in a specific area, the area has been divided into multiple micro Distribution Zones (DZ) with two to four DTRs each and rearranged the network. This is the first of its kind approach for creation and management for Distribution Zones. Various types of actions have been taken to reduce the loss such as identification of consumers having no authorized supply, hassle-free new connection provided through process change, employing local youth as brand ambassadors and CSR initiatives for community development etc. Distribution zone based focused approach helps CESC to identify the problem areas.



#### 5.7.8. CSR initiatives

 The CSR initiatives like computer training program for local youth, health monitoring program for kids, training program for local women were undertaken by the Company to engage with the community in a more meaningful way, thereby curbing the tendency of unauthorised use of electricity.

## 5.8. Distribution loss – Summary of Submissions

- 5.8.1. The Hon'ble Commission is kindly aware that plateaued rate of reduction of distribution loss becomes extremely low beyond a threshold level, and involves significant capital and operational expenditure. Insistence of continuous betterment of performance parameters is not always technically possible and may prove to be counter-productive for the consumers.
- 5.8.2. Further, it is an acknowledged technical fact that higher the proportion of low voltage sales, higher is the distribution loss on account of technical reasons. HT: LT load mix is beyond the control of any licensee and depends entirely on the consumer demand pattern. It is a matter of record that proportion of sales of electricity to high voltage consumers has been gradually declining in CESC's licence area. Simultaneously, with increasing urbanisation and vertical growth, low voltage sales have been on the increase. All these factors, which are entirely beyond CESC's control, had a marked adverse impact on CESC's distribution loss.





- 5.8.3. Theft has been observed to be perpetrated by consumers of CESC as well as people who are not authorised consumers of CESC. Pilferers continuously engage into various innovative methods to defeat the sincerest efforts of the Company to ensure stoppage of illegal use of electricity. Apart from tackling such issues with technical innovations, the Company also takes steps to create social awareness with active consumer participation. However, it is unfortunate that such consumer education and campaigning do not necessarily yield meaningful results as the miscreants find it beneficial to thieve rather than being compliant with law.
- 5.8.4. The Company continuously keeps the police administration informed about the incidents of pilferage and also seeks the department's support for preventing theft of electricity. There has not been any lack of requisite actions on the part of CESC or its management as is lawfully available before the Company, to deal with the menace of theft of electricity in CESC's area of supply. It is submitted therefore, that loss due to theft / unauthorised use of electricity is an uncontrollable factor for the energy sector, unless, concomitant legal and administrative regime creates the necessary deterrents. Not only the employees of the Company, even common people, trying to curb electricity theft, are also physically threatened at times.
- 5.8.5. The Hon'ble Commission may kindly appreciate that since the Company can take all reasonable steps within the four corners of law, the principal deterrent towards theft / unauthorised use of electricity is in the domain of the Administration and the Judiciary.

  As a law-abiding entity, CESC, a licensee, is duty bound to lodge





complaints with the police administration in each case of detection of theft of electricity and CESC never fails in doing so. But major steps towards annihilating this serious social menace depend upon the serious efforts of administration coupled with timely judicial decisions.

- 5.8.6. It is the Company's concern that without effective administrative and judicial deterrents, it will not be possible for CESC to control the menace and the distribution loss percentage figures will show an upward trend in the coming years unless huge technical, financial, legal and administrative resources are mobilized with all support from the society at large.
- 5.8.7. Considering, inter alia, the above factors, it is submitted that CESC is already operating at optimum level of technical loss and potential for further reduction of distribution loss for CESC system is very low. It requires significant capital expenditure in a continuous manner to strengthen network, appropriate administrative support to control theft and sufficient employee strength.

# 6. **Distribution System Performance**

6.1. Performance of the distribution system is accorded high importance by the Company. The Hon'ble Commission has stipulated stringent standards of performances of distribution licensees. CESC is committed to adhere to the standards set by the Hon'ble Commission.

KAMAL SUMAR PAUL)
REGN NO.2700/04



- 6.2. The Company is deeply grateful for the Awards, Merit and Quality Certificates that have come its way. This reflects the continuous pursuit of the Company in striving for excellence in all spheres of its activities. However, it acknowledges the fact that though these awards recognise the endeavours made in supplying quality power and commensurate reliable service to the consumers, the Company has to continue its endeavours so as to be able to provide quality service to the consumers in future also. Some of the awards received are enlisted below. Some photographs in this respect are attached to this Petition.
  - o CESC attained First Position Award at 11<sup>th</sup> Innovation with Impact Awards for Discoms, Organized by Indian Chamber of Commerce
  - CESC received Runner-up Award for "Best Performing Distribution Company" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)
  - CESC received Runner-up Award for "Best Distribution Company to Promote Consumer Awareness" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)
  - o CESC received Winner Award for "Remote Job surveillance" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)
  - CESC received Winner Award for "Design and Implementation of Online Remote Monitoring Scheme" at Power Awards 2023,
     Organized by Independent Power Producers Association of India

(IPPAI)



- CESC received Winner award for "AASTHA The CESC Voice Assistant" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)
- CESC received Winner award for "Loss reduction at Pilkhana" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)
- o CESC received Winner award for India's Best Utility (Overall) Power Generation, Transmission & Distribution at 16<sup>th</sup> ENERTIA Awards 2023, Organized by ENERTIA Foundation
- o CESC received Platinum award for EKLAVYA CESC Skill Academy Project at Fame National Award 2023 Organized by Foundation for Mass Accelerated Mass Empowerment
- o CESC received award for Role Model in HR Excellence at 14<sup>th</sup> CII National HR Excellence Award 2023-24, Organized by Confederation of Indian Industries.

# 6.3. Consistently meeting universal service obligation

Universal service obligation is an onerous responsibility of a distribution licensee. A large proportion of the consumers of CESC belong to a low consumption segment of around 39 units per month. Less than 9% of total units sold are consumed by about 54% of overall consumer base. However, stringent service obligations are required to be met for this huge consumer base and all necessary expenditure have to be incurred to fulfil the responsibility of universal service obligation cast upon the licensee under the Act. The Company endeavours to fulfil the expectation of its consumers through a number of initiatives and has



been consistently fulfilling its universal service obligation. Details are furnished later in this Petition.

## 6.4. Improvement in services

In the year 2023-24 alone, around 108113 new consumers have been added to the distribution system of the Company. Significant improvement has been achieved in providing new connections by reducing inspection time through computerization of the entire inspection related process. For new applications, information relating to status of application, inspection dates and payable amount along with other relevant information/documents are communicated through e-mails and SMSs. The status of the applications can also be checked from CESC's Mobile APP and the website.

- 6.5. Improvements in metering infrastructure
- 6.5.1. A comprehensive software supported meter management system is in place to keep track of the meters.
- 6.5.2. The Company has achieved 100% metering for all categories of consumers including street lighting supplies of all Municipalities and other Public Bodies except a small portion of one Municipality in the fringe area (around 0.01% of the overall sales) for the year under review.
- 6.5.3. Coverage of Smart Meters increased significantly during the year.

  About 14750 nos. smart meters have been installed in the system in 2023-24. The meter data is available in a browser-based meter



data management system for viewing loading status and breakdowns to help take prompt corrective actions.

# 6.6. Performance improvement measures

The internal measurement and control of various parameters of the distribution system performance are carried out in line with the regulatory needs and consumer expectations on a regular basis and improvements on the same are carried out by taking suitable corrective actions. CESC's overall effort of improving the distribution system performance is broadly structured around the following three themes.

- (a). Strengthening the basic distribution backbone;
- (b). Reliability through service innovation; and
- (c). Prudent maintenance management system.

Each of the above is illustrated in the following paragraphs.

# 6.6.1. Strengthening the basic distribution backbone

(a). CESC is in the process of developing a 220 kV ring-main network to provide 'N-1' redundancy. EHV network development is also being carried out considering merit order despatch of generation and / or purchase of power from different sources. The Company is strengthening the power import capability from Subhasgram sub-station of the Power Grid Corporation of India Limited.



- (b). The Company has stregthened the connection with Kasba 220 kV sub-station of WBSETCL by upgrading the voltage level from 132 kV to 220 kV. This arrangement has provided an additional capacity for importing bulk power from external sources and can also serve as an exit point in future for smooth disposal of surplus power, if any.
- (c). CESC has put together a comprehensive roadmap for strengthening its distribution infrastructure taking into account the long-term demand scenario vis-à-vis increasing dependence on sources located away from load centre. This includes:
  - I. Establishing / augmenting connectivity with state or national grid to facilitate external power procurement.
  - II. Installation of new substations and / or capacity augmentation of existing substations.
  - III. Commissioning of gas insulated substations (GIS) at strategic nodal points to enhance network reliability and facilitate space savings for further expansion program.
  - IV. Space consolidation in existing substations to generate space for capacity augmentation of the substation and for future provisions.

However, the challenges to network addition / augmentation persist in the form of space constraint and RoW issues.

(d). The Company undertakes continuous upgradation of the distribution infrastructure to provide safe and reliable power



supply. These include commissioning of new distribution stations, augmentation of transformation capacities, upgradation of voltage level, establishing ring main connectivity and addition of the network along with use of modern equipment. Statistics of a few measures undertaken for improving system redundancy and reliability are given below.

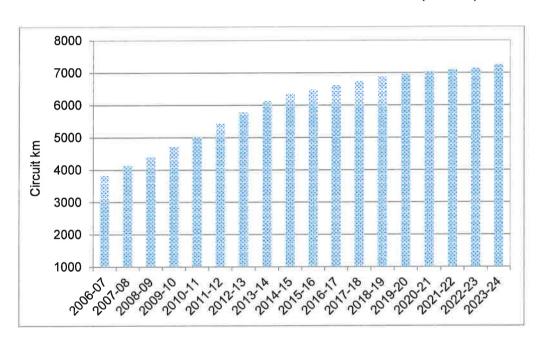


Chart: 6.1: Status of 11 kV and 6 kV network (ckt km)





Chart: 6.2: Secondary LT network (ckt km)

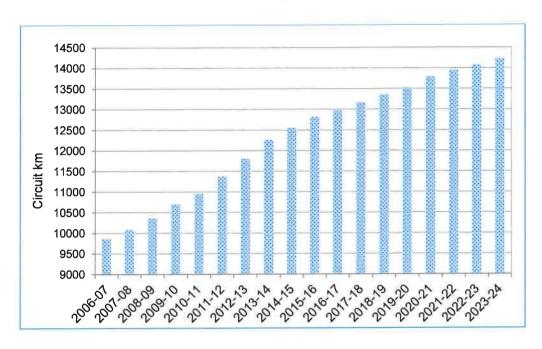
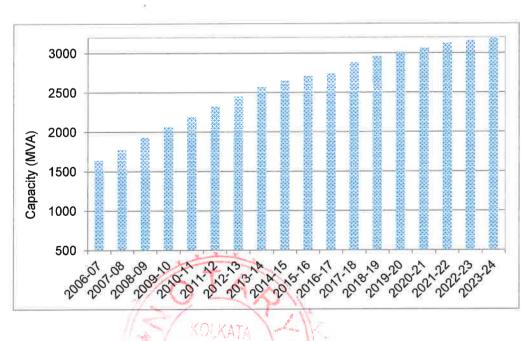


Chart: 6.3: Distribution Transformer Capacity (MVA)





# 6.6.2. Reliability through service innovation

- (a). CESC is committed to continuous improvement of the distribution network to meet the growing demand of its consumers, with safe and reliable supply of electricity being the highest priority. At the heart of the approach to innovation is the commitment to continuous improvement of services. This commitment to innovate and improve covers CESC's entire distribution services, including Customer Relationship Processes, Connection Management, Asset Management, Network Automation, Safety and Sustainability, Remote Work Force Monitoring and back office functions.
- (b). Like all innovations, the innovations in CESC related to the LT network were motivated by operational bottlenecks. Some of the prominent operational bottlenecks faced by CESC are illustrated below.
  - One of the major obstacles faced was that, due to the vast spread and diversity of the LT network, monitoring of the same through a single window was difficult.
  - Supply interruptions due to fusing at pillar boxes were frequent and formed a major portion of the supply interruptions. To reduce such interruptions and improve operational safety, Modified Pillar Boxes, equipped with HRC fuses and door locking arrangement and MCBs are used.



- LT cable faults were another operational bottleneck. The LT cable
  is laid at a much lesser depth as compared to HT cable. Moreover,
  there are numerous joints, predominantly tee joints for providing
  services along LT distributors, thus creating a number of points
  prone to fault at these joints throughout the length of the cable.
- An age-old problem associated closely with LT distribution network is the elimination of low voltage pockets developed as a result of installation of air conditioners and other power guzzling appliances. The problem becomes even more acute when the pockets have to be eliminated while limiting the investment requirement. Capital expenditure on account of Distribution transformers, HV mains and 33 kV network was strengthened during the year to cater to increased demand.
- Being an urban utility, CESC faces the problem of paucity of space, especially for installing pillar boxes which necessarily have to be erected near load centres. Planning for excavation work is also a critical issue, as only a limited time period is allowed by the civic authorities for such kind of work. The cost of road restoration that has to be paid to civic authorities for any excavation work undertaken is quite high for urban areas and forms a significant part (Rs. 4696 lakhs) of the capital expenditure of the Company.
- (c). Some of the innovative approaches adopted by the Company are described in the following paragraphs.
  - LT Control Room: An LT Control Room (operational 24 X 7) has been set up to monitor the operations in the LT System and ensure compliance within stipulated timeline for each critical process.



- GIS and GPS integrated consumer complaint management system: At the LT Control Room, CESC has innovatively blended the GPS based mobile crew tracking system and the GIS based mapping of its consumers for better monitoring of the LT trouble call management.
- AMR/ Smart Meter in DTR integrated with GIS: All the DTRs are
  provided with AMR/Smart Meter. The innovative piece was
  depicting all these DTRs with these online readings on the GIS
  map with colour coding to indicate the load profile.
- Smart Pillar Box: CESC has re-engineered the conventional pillar box, replacing the re-wireable copper fuse units by Fuse Strips fitted with High Rupturing Capacity (HRC) fuses. Also, by adding an automated module to the pillar boxes, a process has been developed where in a SMS is triggered by the automation module during any outages.
- <u>LT Compact Substation (LTCSS):</u> Low voltage complaints are now being resolved, where ever possible, by installation of LTCSS which voltage regulator and capacitor bank, installed individually or in a combination at strategic points in the LT network.
- The Company has targeted new technologies as research and development activities, in a limited scale, in the area of Battery Energy Storage System, Electric Vehicle Charging Station (EVCS), Blockchain technology, which are considered to be essentials for the future power systems.

The Company has installed a Battery Energy Storage of 315 kWh
 at East Calcutta S/S. Various applications e.g. peak power



clipping, energy arbitrage, voltage regulation, frequency response has been studied in detail which would facilitate larger application of BESS in CESC System for improved system performance.

- Repeated occurrences of Cut Out failure due to gross over drawal
  by consumers have prompted CESC to develop a 'Cut Out Less
  Service Unit'. CESC has applied for a patent for the device.
  Additionally, installation of LT auto-changeover device at
  consumer premises has also been aimed at reducing the time for
  supply resumption in case of any LT fault.
- Reduction in feeder tripping: With the aim of increasing reliability
  and providing uninterrupted supply, a spike prevention team has
  been formed to monitor the work done by external agencies and
  to prevent accidental damage to underground cables caused by
  them.
- Several initiatives like mobile vans equipped with GPS tracking system, 'Power on Wheels' service to extend support to the restoration team and Installation of automated supply modules to ensure immediate restoration.
- The timelines for restoration of supply are mostly within the time limits stipulated by the Hon'ble Commission in the Regulations, due to the above multi-pronged activities at all levels in the organisation. However, CESC's distribution network being mostly underground, it is frequently affected by micro-tunnelling as well as excavation work by other service utilities / civic bodies / entities for drainage and sewerage revamping activities etc.



- The Company has taken up a programme for a new state-of-the art SCADA that would comprise Energy Management System (EMS), Distribution Management System (DMS) and Outage Management System (OMS) to facilitate enhanced reliability and operational flexibility.
- These efforts have resulted in improvement in the reliability parameters. CESC has been furnishing information on interruptions from 2015-16 to the Hon'ble Commission in terms of the applicable Regulations with suitable information disclosure in the Company's website as well. Applicable incentive may kindly be allowed to the Company, in terms of Paragraph 11 of Schedule 10 of the Tariff Regulations.

## 6.6.3. Prudent maintenance management system

(a) The Company is making a shift from routine breakdown maintenance to condition monitoring based preventive maintenance, which allows preventive and corrective actions to be scheduled at the optimal time. New technological advances progressively adopted under condition based asset management practices. Partial Discharge (PD) Monitoring enables a comprehensive assessment of the condition of insulation. Different non-intrusive techniques for detection of PD in high voltage apparatus have been evolved. High Frequency Current Transformer are deployed for online monitoring and localization of partial discharges in HT and EHT underground cables. Ultrasound Detection is employed



for detection of surface discharges. Transient Earth Voltage Measurement - Suited generally for indoor air insulated switchgear. Radio Frequency Interference Scanning is used for outdoor installations. Ultra-High Frequency Technique is deployed for SF6 gas insulated switchgear. Thermographic Detection (Infrared Radiation) of hot spots in energized distribution equipment is carried out.

(b) CESC has developed Distribution Related Engineering Asset Management System (DREAMS), a software tool which has helped optimisation of maintenance and related expenditures of distribution assets over their life cycle and to formulate an asset replacement strategy. The Company has done condition monitoring of HT assets belonging to the HT consumers, so as to locate partial discharges and hotspots in their power system and recommend corrective measures.

#### 7. Consumer Services

7.1. CESC is consistently serving over 3.7 million customers, delivering reliable services by leveraging analytics amidst the evolving consumer expectations and climate changes, all while striving to maintain high levels of service delivery as a primary goal. Several initiatives have been launched to future-proof customer service, some of which are

outlined below:



- 7.2. New connection to consumers:
- 7.2.1. CESC added around 108113 new consumers during the year 2023 24. The online application process has been streamlined to enhance the ease and convenience for applicants, with all applications being received and processed online.
- 7.2.2. By setting challenging internal benchmarks, CESC has significantly reduced the time required to establish new connections.
- 7.2.3. For new applications, information relating to status of application, inspection dates and payable amount along with other relevant information/documents are communicated through e-mails and SMSs. The status of the applications can also be checked from CESC's Mobile APP and the Website.

#### 7.3. Complaint handling

• The Company offers various channels for consumers to report issues or complaint, allowing them to choose the method that is most convenient. The available options include:

# 7.3.1. Digital avenues for Complaint Handling

Customers can report complaints through the Company's website (www.cesc.co.in), as well as via email (cesclimited@rpsg.in), SMS (56070), WhatsApp (7439001912), Chatbot, social media platforms (Facebook, X, Instagram, LinkedIn) and the mobile app (CESCAPPS). Complaints can also be auto responded / docketed at Helpline Numbers (1912, 4403-1912, 3501-1912, 1860 500 1912).



- In 2023-24, social media efforts were enhanced to ensure timely responses to customer inquiries and complaints.
- The CESC website is the organizations primary digital asset of the company, which hosts all its digital services. It is user-friendly, deviceagnostic and fast, enriched with all the crucial information about the company and serves as a 24x7 virtual office.
- Chatbot eBuddy: To continuously improve customer satisfaction and reduce wait times, CESC introduced the eBuddy chatbot on its website. This chatbot helps consumers access a range of e-services while assisting with various inquiries and complaints, providing a seamless and enjoyable interaction.
- WhatsApp Bot: CESC also launched a WhatsApp service, allowing customers to receive various services, such as viewing/downloading monthly bills, registering complaints, checking their status, reporting supply disruptions, accessing FAQs, and more. By the end of 2023-24, this service had received approximately 8 million messages from around 2.18 lakh unique users.
- The "Aastha" digital voice bot enhances customer experience. Equipped with AI, machine learning, and natural language processing capabilities, this humanoid voice bot is integrated with the CRM and Outage Management System to provide efficient and uniform customer assistance. CESC is the first power utility in the country to implement voice-assisted outage management, allowing for multilingual support.





# 7.3.2. Key Account Managers

 CESC has designated "Key Account Managers" to serve as a single point of contact for customers, providing personalized assistance and fostering long-term beneficial relationships. This initiative encompasses a significant number of customers across both HT and LT segments.

#### 7.3.3. Commercial helpdesk

- An extension of the existing supply call center, the Commercial Call
  Center offers comprehensive support for all commercial complaints,
  including billing and payment issues. Customer calls are directed
  here to ensure streamlined service. Additional guidance on valueadded services, such as name changes and load enhancement
  applications, is also provided.
- 7.3.4. The Centralized Complaint Management Center functions as the support hub for the Commercial Helpline, ensuring consistent and accurate resolutions for commercial complaints across the service area.

# 7.3.5. IVRS enabled Supply and Billing Call Centres

CESC operates a 24-hour call center (Telephone Nos. 033 3501 1912, 033 4403 1912, 1860 500 1912 & 1912) to quickly address supply-related issues and also to handle customer billing inquiries through IVR directed to the Commercial Helpline.





 A dedicated HT Call Center (Telephone Nos. 033 - 6901 9956 and 033 - 4806 9957) operates 24/7 for HT customers to resolve supply or billing issues promptly.

## 7.3.6. Separate HT and LT Control Rooms

- A designated help desk in the Control Room assists with HT customer complaints, staffed by teams of distribution engineers, supervisors, and technicians available around the clock to address technical issues in the distribution network.
- The LT Control Room, operated by distribution engineers, enhances the connection between Call Centers and Regional Reporting Centres and maintenance teams equipped with wireless communication, GPS, emergency systems, and backup generators.

# 7.3.7. CAPA (Corrective Action Preventive Action):

• Corrective and preventive action (CAPA) refers to enhancements made to organizational processes designed to eliminate the root causes of non-conformities or other undesirable situations. This process encompasses four stages: Feedback, Correction, Corrective Action, and Preventive Action. Feedback involves establishing mechanisms within the organization to identify non-conformities. Correction addresses and resolves the immediate issue faced by customers. Corrective actions aim to prevent the recurrence of the identified problem under similar circumstances, while preventive actions are focused on long-term solutions to avoid future



occurrences, regardless of the circumstances. Key measures implemented as part of CAPA include:

- An extensive upgrade in proactive SMS communication to affected customers. Customers receive interim updates via SMS notifications for Closed dockets marked as 'HT-Calls' by the depot, Reports of LT faults associated with a docket and updates on pro active underground or overhead job reports linked to a docket.
- Enhanced SMS communication for customers impacted by supply outages, facilitated by faster SMS triggering times and batch processing for bulk SMS deliveries.
- Immediate payment receipts sent to customers via email and SMS,
   eliminating the previous two-day delay for payment confirmation.
- SMS messages that include links for disconnected customers to view and download their reconnection bills due to non-payment.
- 7.3.8. Other Customer friendly initiatives related to Complaint Management
  - CESC has been operating successfully a Queue Management System (QMS) in its regional offices to reduce time required for handling Customer issues. Customer complaints are also registered and documented systematically through this process. Systematic documentation of Customer complaints / queries and analysis of captured data help in identifying the potential thrust areas in operation.



 CESC has updated the CESC Mobile App (CESCAPPS) with additional features, to make it modern, state-of-the-art and even more user-friendly with features such as 'hassle-free registration', 'customizable dashboard based menu', 'notifications' and 'one-touch Complaint docketing facility'.

#### 7.4. Grievance Redressal Forum

7.4.1. The Grievance Redressal Forum (GRF) was established in accordance with the Electricity Act of 2003 and operates in compliance with the relevant regulations. The activities of the GRF are reported to the Hon'ble Commission. To inform customers about the grievance redressal process, details are included in electricity bills and advertised in newspapers. Additionally, a summary of the grievance redressal procedure, along with the names and official titles of the Grievance Redressal Officers (GROs), Central Grievance Redressal Officers (CGROs), and the Ombudsman, are posted on the Company's website.

# 7.5. Meter reading and billing

7.5.1. CESC has adopted handheld devices for meter reading for sending prompt notification to consumers and faster billing. Billing activities follow a structured schedule that begins with meter reading, continues with the generation of the electricity bill, and concludes with the delivery of the bill to the customer, ensuring sufficient lead time before payment. CESC also offers the option for customers to receive electricity bills in vernacular languages (Bengali/Hindi).



## 7.5.2. Digital services related to billing

Bills are sent to customers via email immediately upon generation, provided the customer has registered their email address with CESC. Various SMS and Email services keep customers informed about scheduled meter reading dates, reading details, bill delivery dates, security deposit payments for name changes, and cheque receipts. Wondermail, a mobility solution for CESC customers, has been introduced. The Bill Generation SMS now includes a special Wondermail link, providing access to services such as viewing and paying bills, receiving regular updates on CESC's #LiveFreeBreatheFree Campaign, and online payment options.

The CESC Mobile App (CESCAPPS) offers an extensive range of features, including viewing bill details (including last payment information), payment options, e-bill registration, lodging complaints, and checking the status of new connection applications. The app also provides notifications for meter readings, bill information, and real-time power outage alerts for customers.

## 7.6. Bill payment options

#### 7.6.1. Cash offices

The Company operates 36 cash offices to facilitate payment collection for electricity bills and other services, such as new connections, additional security deposits for load extensions, supply reconnections, and prepaid recharge vouchers. Customers can also make advance payments, with cheque drop boxes conveniently



located across the licensed area. For walk-in customers, cardswiping machines are available at 15 cash offices. Additionally, payment kiosks are installed at various locations, enabling customers to easily pay their electricity bills.

## 7.6.2. Digital payment options

As part of the nationwide Digital India movement, the Company has been actively enhancing digital payment methods. It offers a variety of convenient and user-friendly online payment options, including multiple mobile wallets, debit/credit cards, net banking, ECS, NEFT/RTGS, Auto Pay, Bharat QR, and UPI. CESC has introduced eNACH (Electronic National Automated Clearing House) which is a digital payment system by the National Payments Corporation of India (NPCI) which facilitates automatic recurring payments for monthly electricity bills.

- In 2023-24, the Company integrated with Bangla Sahayata Kendras (BSKs) established by the Government of West Bengal.
- CESC has implemented WhatsApp Pay (9167777776) which is a digital payment feature integrated into the WhatsApp messaging platform to collect payments real time through UPI.

 Customers can now pay their CESC bills in just two simple steps by calling 08045471912—no internet, app, or smartphone is required.



7.6.3. These initiatives have significantly improved the overall customer experience and increased the adoption of digital payments over the years. To further expand digital payment penetration, the Company continuously explores and integrates new online payment platforms and services into its digital ecosystem.

## 7.7. Customer engagement initiatives

## 7.7.1. Customer Outreach through digital modes

- Awareness Programme on Electrical and Fire Safety: Electrical and Fire Safety Workshops were organized for Electricians, prior to Durga Puja and festive season to spread safety awareness and to educate the Electricians about the best practices to reduce fire risks and the necessary measures to be taken in the event of a fire. Several electrical safety tips for the prevention of electrical hazards were also shared.
- CESC organized workshops called 'Aalaap' at eminent housing societies of Kolkata to increase awareness about electrical safety and CESC's digital services with a focus on sustainability.
- A couple of Consumer centricity workshops named 'Bandhan' were organized to educate employees on new age Customer service, by internal and external faculty.

# 7.7.2. Customer Communication through Digital Channels

 CESC has been the third most followed Indian utility brand on Faceook since August 2022. In 2023-24, CESC's social media



content strategy was revamped to suit a wide range of audiences based on their age groups and interests. CESC introduced several new segments such as #LightsCameraKolkata dedicated to CESC's contributions to the city of joy, #CESCCares promoting CSR initiatives, #HeroesofCESC and #LeadingwithLight promoting the efforts and dedication of CESC employees etc. CESC social media handles also feature safety tips focussed on electrical, monsoon and fire safety regularly.

7.7.3. 99% of the social media interactions of CESC are currently responded within 5 minutes and the company also has a provision for 24x7, 360 degree social listening to respond to Consumer grievances and queries as soon as possible without any misses.

#### 7.8. Access to Useful Information

- 7.8.1. In compliance with the Regulations set forth by the Hon'ble Commission, essential information regarding new supply applications, cash collection office details, their operating hours, and the grievance redressal procedure is prominently displayed at key locations and on the Company's website.
- 7.8.2. Furthermore, as various e-services are gradually being implemented, CESC's corporate website has transformed into a virtual office available 24/7, allowing customers to access a range of web services.
- 7.8.3. Customers can find information about their consumption and payment history, as well as security deposit details for the current



and previous financial years on the website. Additionally, a consumption charge calculator has been integrated to give customers an estimate of their monthly charges, complete with necessary breakdowns. High-Tension (HT) customers can view their daily real-time consumption, payment history, contractual load history, and security deposit status upon registration. There are also options for lodging complaints and reporting power theft online.

- 7.8.4 #LiveFreeBreatheFree: As a responsible corporate citizen, CESC is dedicated to making Kolkata and Howrah cleaner and greener. In line with this commitment, the Company has established Electric Vehicle Charging Stations in key locations throughout the city and has introduced electric vehicles (both 2 and 4-wheelers) into its operations. The Company encourages customers to adopt clean technologies for home use, such as electric cooking, air purifiers, and energy-efficient appliances like star-rated air conditioners, geysers, and refrigerators. With increasing air pollution, electric vehicles and cooking appliances represent cleaner, safer, and more affordable energy options. The Company is actively working to raise customer awareness about these initiatives, with detailed presentations available on its website. Information regarding these efforts is shared during customer-facing events and meetings. Additionally, regular updates promoting the Company's sustainable initiatives are shared on social media, including content that raises awareness about electric cooking and electric vehicles.
- 7.8.5. The Company regularly communicates safety information, online payment procedures, grievance redressal forums, and details about new initiatives through messages in electricity bills and



mailers/emails. Customer booklets and handbooks are available at various touchpoints to enhance general awareness. Furthermore, CESC participates in popular radio and TV programs to disseminate information relevant to its customers.

## 8. Sourcing of Power

- 8.1. The licensed distribution business of the Company has been procuring power generated by the generating stations of its generation business in terms of the orders issued by the Hon'ble Commission from time to time and the Minutes of Meeting dated 22.03.2007 signed between the generation and distribution divisions of the Company. Submissions relating to power purchase have been made through the Petition dated 17 October 2024 for Fuel and Power Purchase Cost ("FPPC Petition") and are not repeated herein to avoid prolixity. The Hon'ble Commission may kindly refer to the FPPC Petition for submissions on fuel and power purchase costs. All necessary forms and computations are however repeated in this Petition for ease of reference of the Hon'ble Commission.
- 8.2. As desired by the Hon'ble Commission, the Company has made arrangement for procurement of power from DEEP portal under Section 63 of the Electricity Act, 2003 on short term basis, under Regulations 7.5.1 and 7.5.10 of the Tariff Regulations. Necessary documents relating to the above have been placed in the Petition in Volume 10 of the Petition. As already detailed in the FPPC Petition, sources of procurement including own generation was dispatched on the basis of



merit order principle and details were intimated to the Hon'ble Commission earlier and placed in Volume 11 of this Petition.

- 8.3. Copies of Power Purchase Agreements / arrangements and sample copies of Connectivity Agreements entered into with consumers having roof-top solar sources are also collectively enclosed in the APR Petition (Volume 10).
- 8.4. Copies of Power Purchase Agreements / arrangements, procurement arrangements and sample copies of the Connectivity Agreements entered into with consumers having roof-top solar sources are also collectively enclosed in the "Appendix" in Volume 10 of the Petition.

## 9. Environmental Responsibility

9.1. "Compliance of environmental standards to reduce the health risks of citizen through less pollution from generation source ....." has been accorded a special mention in the Regulations framed by the Hon'ble Commission. It is humbly submitted that the Company takes special care in achieving the same, as detailed hereinbefore in this Petition. However, in this context it is mentioned that introduction of 'zero' effluent discharge system causes rise in auxiliary consumption in all the stations where such installations take place. Also, implementation of the stricter pollution control norms notified by the Government of India will require installation of additional plant and equipment and consequent rise in auxiliary consumption. The effect of increased auxiliary energy consumption due to installation of such additional equipment is required to be factored in the station auxiliary



consumption figures. Therefore, due allowances may kindly be made by the Hon'ble Commission to cover the same as well as other factors like progressive ageing and operation of generating stations.

- 9.2. Maintenance of generation at satisfactory levels of PLF will obviously entail removal of high volume of ash. Indian coal has high level of ash content. A judicious mix of coal used and a comprehensive approach towards ash management is thus required including resorting to washing of coal.
- 9.3. The Company takes due care to ensure that all the generating stations comply with the governing environmental standards. Special importance is accorded to monitor and control emissions and effluents. Emission levels at the Company's power plants are far better than the standards set by the West Bengal Pollution Control Board. The stations are equipped with extremely efficient electro static precipitators. Zero discharge system is in place in all the generating stations. MoEFCC guidelines have been amended to regulate the generating stations with stricter pollution control standards.
- 9.4. In recognition of its achievements, the generating stations of the Company have been merited with a number of awards and certificates as mentioned below, photographs for some of which are submitted with this Petition.
- 9.5. Budge Budge Generating Station

Budge Budge Generating Station received Digital Transformation
 Award for "Innovative (Automated operation of Unit 3 Cooling





Tower Blow down valve)" at CII DX Operational Excellence Awards 2023

- Budge Budge Generating Station received 1<sup>st</sup> Runner up Award in the category of "Energy Intensive Group" at 16<sup>th</sup> CII Energy Conservation Awards (ENCON) 2022-23
- Budge Budge Generating Station received Gold Award for "outstanding achievement in environment improvement" at 14<sup>th</sup> Exceed Green Future Award 2023
- Budge Budge Generating Station received Winner Award for "Outstanding achievements in water management" at Global Water Awards 2023
- Budge Budge Generating Station received Gold Award at Apex
   India Quality Excellence Award 2023
- Budge Budge Generating Station received Winner Award for "Energy Efficient Unit" at CII National Awards for Excellence in Energy Management 2023
- Budge Budge Generating Station received Winner award –
   Eastern Region for "Best ESG Initiative Water Efficiency" at The
   Power-Gen ESG & Sustainability Awards 2023 by CEE
- Budge Budge Generating Station received Platinum Award in the category "Large Enterprise-Power Sector" at 17<sup>th</sup> ICC Environment Excellence Awards 2023





- Budge Budge Generating Station received Winner award for "Best National Water Efficient Plant of the Year" at 2<sup>nd</sup> National Power-Gen Water Awards 2024 by Council of Enviro Excellence
- Budge Budge Generating Station received Gold Award for "Water Stewardship" at Apex India Green Leaf Awards 2023
- 9.6. Southern Generating Station
  - Southern Generating Station received Gold Award in the category
     "Large Enterprise-Power Sector" at 17<sup>th</sup> ICC Environment
     Excellence Awards 2023.
  - Southern Generating Station received Gold Runner up Award at
     5<sup>th</sup> ICC National Occupational Health and Safety Awards 2023
- 9.7. As mentioned hereinabove, the Company is alive to its environmental responsibilities and takes due care to ensure that all its generating stations comply with the governing environmental standards. Special importance is accorded to monitor and control emissions and effluents. To contain ash levels at the generating stations, CESC has installed a suitable plant to partially wash its coal requirement. Environmental Statement reports for the year ending 31 March 2024 as submitted to the West Bengal Pollution Control Board, are enclosed in the Appendix (Page 252, Volume 12). Also recognising the stricter pollution control norms for coal fired generating stations, notified by the MoEFCC, Government of India, active consideration is being given, as detailed in the FGD Petition, for issues relating to the necessary modifications in





the infrastructure and installations of the existing generating stations. This also entails availability of land and other resource requirements. This will require substantial capital expenditure. The Hon'ble Commission has accorded in-principle approval for capital expenditure for reduction of oxides of Nitrogen vide Order No. OA-484/24-25 dated 11 November 2024. As directed, the Company shall keep the Hon'ble Commission apprised of any development in this regard at material point of time.

## 10. Benefit Sharing with consumers due to Improved Performance

- 10.1. The present Petition proposes to share significant benefits with the consumers in terms of the directions and / or the Regulations of the Hon'ble Commission.
- 10.2. The Company prays for appropriate share of controllable operational norms as well as other businesses undertaken by the Company in terms of the regulations. In this context, it is submitted that benefits commensurate with performance on distribution loss are proposed to be passed to the consumers through this Petition in terms of the Regulations.
- 10.3. In summary, the Company, due to its efficient operations and initiatives on various innovative activities has ensured considerable benefits for its consumers.





#### 11. General Form and Structure of the Petition

- 11.1. In terms of the Tariff Regulations, the applicable formats are being submitted to the best understanding of the Company. Additional notes, data and reconciliation, wherever required for clarity, in conformity with the Regulations, have been furnished. CESC undertakes to make available such other or further information and documents as the Hon'ble Commission may consider appropriate and make a requisition therefor. The Company would also like to furnish additional information / documents as may be necessary for disposal of this application, if required.
- 11.2. The Attachments, Annexes and the Appendix furnished herewith form a part of this Petition for Annual Performance Review.
- 11.3. In order to retain appropriate focus, figures have been rounded off for final presentation in certain cases. All compliance requirements, as understood and interpreted, have been met to the extent possible. In appropriate cases, items in applicable forms of submissions have been regrouped for clearer presentations. The Hon'ble Commission may be pleased to refer to the Appendix for the relevant statements and requisite compliance reports. Detailed status reports on compliances are being placed with this Petition. Suitable Auditors' Reports / Certificates as well as reconciliations have been furnished to bring out the details pertaining to the generation business and licensed distribution business.

11.4. As required under the Tariff Regulations, the Company is providing the related information for Annual Performance Review as per the



applicable formats. This information is provided in Annex 1 of this Petition.

- 11.5. The statutory audited data, embodied in the Audited Annual Accounts of the Company, being the audited annual accounts of the Company for the year 2023-24, under the Companies Act, 2013 are enclosed in "Annex C1" (Volume 3, Page 1).
- 11.6. As indicated in this Petition, benefits have been proposed to be passed on to the consumers duly in accordance with the Tariff Regulations. The Auditors' Report and Certificate on earnings from sale of electricity to persons other than own consumers and West Bengal State Electricity Distribution Company Limited (WBSEDCL) in 2023-24, is placed in "Annex C2" (Page 261, Volume 3). The Company has also furnished Auditors' Report and Certificate on purchase / sale to own consumers, WBSEDCL and persons other than own consumers and WBSEDCL and consumption in own premises for 2023-24 in "Annex C3" (Page 265, Volume 3). Auditors' certificate relating to the number of consumers as on 31 March 2024, electricity consumption during 2023-24, the total connected load as on 31 March 2024 and revenue earned during 2023-24 under each tariff category has been placed in "Annex C4" (Page 268, Volume 3).
- 11.7. Variable cost has been furnished in this Petition along with attachment and details placed in this Petition. Auditors' certificates and other details on Fuel and Power Purchase have been furnished in terms of Regulation 2.8.7 read with Schedule-7A of the Tariff Regulations.





## 12. Treatment of Specific Items

- 12.1. In accordance with the directions of the Hon'ble Commission, the Auditors' certificate on break-up of expenditure between the distribution and generation businesses of CESC is placed in "Annex C5" of the APR Petition (Page 269, Volume 3).
- The Company humbly submits that the capital expenditure is incurred 122 mainly on account of strengthening of the distribution network/ umbrella network, assuring reliability of supply through service innovation, implementation of prudent maintenance management system and ensuring better consumer service. The Company, through proper planning, deferment and optimisation, was able to contain distribution capital expenditure for the year at Rs. 437 crores. The Perspective Plan submitted before the Hon'ble Commission with the multi-year tariff application for the eighth control period has been broadly followed with necessary deferment and optimisation. Capital expenditure was done in small schemes, in terms of Regulation 2.8.2.3, 2.8.4.1 of the Tariff Regulations, for which no prior approval of the Hon'ble Commission is necessary. Necessary investments are being made to maintain and improve quality and reliability of services for CESC's consumers. It is also submitted that getting possession of suitable plots of land and RoW in a highly developed urban area is a serious issue. Though the Company makes every feasible effort to obtain land and RoW to adhere to its plan, the situation is often beyond its control and therefore in some cases, there are some modifications at a later date to accommodate exigencies and uncertainties arising out of non-availability of suitable land / RoW.

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- In the MYT Order, the Hon'ble Commission did not consider any asset 12.3. addition for the generation function of the Company and has significantly reduced asset capitalisation for distribution function, by way of allowing capitalisation of assets only for the new works/ supplies. Such methodology of determination of capital expenditure and asset base adversely affects the ability of the Company in creation and maintenance of requisite infrastructure to serve the consumers. It is respectfully submitted that the asset addition depends on load growth and future network development. In generation function, capex is incurred to meet various requirements under different capex programs such as, for refurbishment of plant and equipment for life enhancement, for ensuring safety and security, for adoption of new technologies and also to meet environmental requirements. Moreover, it is humbly submitted that in distribution function, when gamut of expenditure encompasses such as for EHV lines to metering assets with relative emphasis changing every year based on consumer mix, capacity of evacuation, coverage of reading, necessity of capacity addition and maintenance, case specific determination is applicable. It is being submitted that the claims under such heads based on actual audited figures in this Petition may kindly be considered favorably by the Hon'ble Commission.
- 12.4. It is respectfully submitted that elaborate process is in place since long, for approval of capex, tracking thereof and conversion of capex into capital asset on capitalization, asset being put into use and eventual retirement as detailed in Appendix (Volume 11). Capex justification reports, reports for job completion and capitalization, sample work orders for supply and service contracts are placed in the Appendix in Volume 14 to 16. Details of asset addition, retirement, capex are





furnished under relevant form of Annex 1. As elaborated earlier, during the year the Company has faced severe heat wave (maximum demand exceeded 2600 MW on many occasions) necessitating investment in capital expenditure to override the challenging situation. Needless to mention that investment in capital expenditure also helps in maintaining a safe and reliable network benefitting the end consumers. It is respectfully submitted that there has been no O&M nature of expenses included in capital overhauling or capital expenditure.

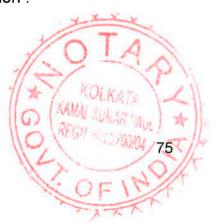
- 12.5. In the context of distribution gain, it is humbly submitted that Regulation 2.5.5.4 of the Tariff Regulations provides for share of gain to a distribution licensee from improved performance of controllable factors. Variation in Distribution Losses is a "controllable" factor in terms of Regulation 2.5.5.2 (a) of the Tariff Regulations.
- 12.5.1. It is humbly submitted that the Hon'ble Commission vide its Order dated 01.08.2022 passed in Case No: FPPCA-93/18-19 and APR-73/18-19 for FY 2017-18 while carrying out true-up of the distribution business of the Company, had allowed distribution gain on variable as well as fixed cost for distribution loss as the same was better than the norm provided in the Tariff Regulations. Notably, in paragraph 2.19.2 of the aforesaid Order, variable part of the distribution gain was admitted and passed through accordingly in the admissible fuel and power purchase cost. Further, under table 4.3-1 in paragraph 4.3 of the APR Order, adjustment on account of balance gain share was duly accounted for while deriving the net earnings for sale of electricity and subsequently to arrive at net recoverable amount for the concerned year. Thus, effectively, distribution gain was allowed to be passed through considering variable as well as fixed cost. The





same approval has also been followed by the Hon'ble Commission for the earlier years as well. However, in the APR Orders for 2018-19 and 2019-20 of CESC, distribution gain has been allowed for fuel and power purchase cost only and not on account of admitted fixed cost, which is evidently in contravention of approach / principle adopted by the Hon'ble Commission in the APR Orders for previous financial years and principles henceforth followed for the Appellant.

- 12.5.2. In view of the aforesaid submissions, it is prayed before the Hon'ble Commission that, such distribution gain may kindly be allowed considering variable as well as fixed costs.
- 12.5.3. It is humbly submitted that in terms of the established regulatory principles, in case an expense is considered controllable, allowability may be considered in terms of Regulation 2.5.5.4 and if the said expense is considered uncontrollable, then the actual amount may kindly be allowed after prudence check.
- 12.5.4. It is submitted that, the Company was contrained to file a Review Petition before the Hon'ble Commission against the APR Order for 2019-20. Issues relevant for consideration of legitimate entitlement to the Company in terms of such Review Petitions and Regulations of the Hon'ble Commission are detailed as under for appropriate considerations of the Hon'ble Commission, while determining the entitlements of the Company for the year 2023-24 while disposing this Petition:





(i) Non-allowance of Capital cost for assets being capitalised in 2023-24 rather than allowance carried forward to subsequent period:

Hon'ble Commission has applied some general criteria for identifying capex based on use and benefits accruing pattern. Accordingly, the capital expenditure claimed by the Company in 2019-20 have been classified under various heads by the Hon'ble Commission. One such head of expenditure being the "Capex for Assets carried forward to subsequent period for servicing through tariff on completion" and under such head Rs. 7063 lakhs of special distribution projects have been wrongfully withheld by the Hon'ble Commission for 2019-20. In this context it is humbly submitted that, going by the principle of identifying capex based on use and benefits accruing pattern adopted by the Hon'ble Commission in the APR Order, projects that were completed and commissioned in 2023-24 and details for which were provided in the APR Petition, is required to be allowed with consequential impact to be provided in return on equity, interest, depreciation and carrying cost.

(ii) Inadvertent Deduction of cost for assets considered as O&MFor Generation.

In the APR Order for 2019-20, the Hon'ble Commission has considered "O&M nature of expense considered by CESC Limited as Capex" and has concluded that "asset for Rs.4616 lakh are found of O&M nature and not admitted;". However, no corresponding amount was considered towards actual O&M expenses in 2019-20 in the APR Order of FY20. While the Petitioner submits that the capital



expenditure details submitted in this Petition does not contain any job of O&M nature to the best of understanding of the Petitioner, should any item of capex is determined to be of O&M nature, such expenditure is to be considered with actual O&M expenses submitted through this Petition for appropriate allowance to the Petitioner subject to share of gains or losses in terms of Regulation 2.5.5.4 of the Hon'ble Commission.

(iii) Inadvertent Deduction of cost for assets considered as O&MFor Distribution

It is humbly submitted that, in APR Order of 2019-20, Rs. 2119 lakhs of assets under Distribution function have been disallowed for being of O&M nature, whereas there is a lowering of Rs. 3440 lakhs with respect to non-allowance of the amount admitted in the MYT Order, in terms of the APR Order. However, it is noticed that while these amounts have been deducted from Capital Expenditure, they have not correspondingly been included in controllable maintenance expenditure. In this petition, in case any amount of capex is determined as of the nature of controllable factor of distribution maintenance, the same may be considered along with the actual controllable expenses for consideration of appropriate allowance in terms of regulation of the Hon'ble Commission.

Non-allowance of Capital cost for assets like tools, tackles created under small scheme of Routine Capital Expenditure may be considered allowable in terms of applicable regulations (2.8.2.3, 2.8.4.1 etc.) by the Hon'ble Commission..



(iv) Principles adopted during MYT has been modified during APR for determination of cost of captive coal

For coal from captive mine at Sarisatolli, mining charges are not passed on to the consumers in accordance with the statutory provisions. However, apart from mining costs, certain other charges like sizing / crushing in mine, transportation, evacuation facility charges etc. are incurred. These costs are covered in accordance with various price notifications issued by Coal India Limited. During issue of the MYT Order for the sixth control period, all these charges were clearly discovered and allowed by the Hon'ble Commission. However, during the APR exercise, these expenses have been disallowed. It is humbly submitted that, in terms of Regulation 2.6.8 and 2.6.9 of the Tariff Regulations, an application of Annual Performance Review is required to be reviewed in the same manner as done during determination of ARR of the ensuing year. The scope of the APR is merely a comparison of the actual performance of the licensee with the approved projection of ARR as given in the Tariff Order. Therefore, admissible average cost of coal for the generating stations as well as consequential change in allowable fuel cost at distribution input for sale to consumer and licensee, shares of gains attributable to consumers and WBSEDCL as well as admissible amount on account of savings due to improved distribution loss may be accordingly determined...

The Company also prays for early and favourable disposal of the aforesaid Petition. As an endeavour towards contributing to cleaner environment, the Company has set up few Electric Vehicle (EV) charging stations at some major locations within its licenced area.

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REGN NO.2700/04



The Hon'ble Commission may acknowledge such initiative and consider providing additional capital expenditure, if required, towards development of such infrastructure.

## 12.6. Operation and Maintenance Expenses

- Regulated licensees are statutorily required to provide critical 1261 services, often under unfavourable circumstances in this country. They need to be able to finance their on-going operations including essential repairs and maintenance. It is humbly submitted that the Company practices cost control and economy to the best of its endeavours and abilities. Asset base of CESC includes ageing plant and equipment which need regular and proper upkeep following an appropriate maintenance schedule so as to keep them in good operating condition. The Company follows superior operation and maintenance practices across its various functions in generation and distribution. The licensed area has limited road space. Majority of CESC's distribution network is underground. Micro-tunnelling as well as massive excavation by other service utilities / civic bodies / entities for drainage and sewage revamping activities etc. randomly undertaken in and around the city and fringes, frequently damages underground network of the Company. While this issue has been reported before the appropriate authorities, damages to the network invariably result in incurrence of added repairs and maintenance costs.
- 12.6.2. CESC has implemented condition based monitoring of plant and equipment. Instead of carrying out time based maintenance program, under the present regime, the health of plant and





equipment are checked periodically with modern and state-of-the-art devices and maintenance is carried out on the basis of the results of such health check-up. In-house developed asset management software 'DREAMS' is used for monitoring health, failure history and maintenance details of operational assets. Thermographic and ultrasonic detection of hot-spots are being conducted to take up corrective actions. This has enabled reduction in faults / breakdown of plant and equipment. Safety standards specified by the Central Electricity Authority in its Regulations are being adhered to. The documents are made available to the O&M engineers and associated persons. At present, the documents are available in the in-house developed MIS named DREAMS. The parameters and the contents mentioned in the documentation are sometimes customised depending upon the actual situation.

12.6.3. It may be worth mentioning that peak power requirement is contributed by undeclared installation and use of power guzzling equipment like air-conditioners, geysers, washing machines and other white goods despite CESC's sustained campaign on voluntary declaration for additional load. Majority of such equipment are being used during peak hours of the day and the electricity drawn by the consumers is generally peak-coinciding. Appropriate TOD tariff for such residential segments merit consideration by the Hon'ble Commission. Additional electricity demand from such consumers puts considerable pressure on CESC's distribution equipment viz. distribution transformers, cables, services, meters etc. and sometimes leads to supply failure due to overloading, which calls for

additional O&M expenses.



- 12.6.4. Pilferage of electricity also leads to overloading of plant and equipment beyond the optimum operating capacities. Therefore, the same get damaged and need special repair and maintenance to avoid undue trip / failure. To meet its statutory supply obligations and to ensure quality supply, as well as to maintain availability of the generating stations, it is necessary for the licensee to carry out appropriate repairs and maintenance. The Company submits that the same is done following prudent utility practices to protect the interest of the consumers. Such expenses may kindly be allowed by the Hon'ble Commission.
- 12.6.5. CESC has been setting up adequate infrastructure to cater to ever increasing consumer demand. Auditors' certificate on total number of transformers and transformation capacity has been placed in "Annex C6" of this Petition (Page 270, Volume 3) and voltage level-wise distribution line length has been placed in "Annex C7" of this Petition (Page 271, Volume 3), as directed by the Hon'ble Commission in the MYT Order for the fifth control period.
- 12.6.6. It is humbly submitted in the context of O&M expense for generation function that the Tariff Regulations provide the norms for coal fired thermal generating stations under operation.
- 12.6.7. It is humbly submitted that O&M expenses being a controllable expense in terms of Regulation 2.5.5.2, may kindly be allowed in terms of the Tariff Regulations. Actual figures for O&M Expenses have been furnished from the audited annual accounts. Break up of "Other expenses" taken from the audited annual accounts have been certified by the Auditors with due segregation between the





functions of Generation and Distribution etc., which has been annexed in the APR Petition in Page 269, Volume 3.

## 12.7. Employee Cost

- 12.7.1. The Company could bring down its employee strength, in spite of significant surge in the Company's activity level. In terms of direction of the Hon'ble Commission, necessary Auditors' Certificates on the employees' details has been placed in "Annex C8" (Page 272, Volume 3) and "Annex C9" (Page 273, Volume 3). The employee cost contains the effect of enhanced activity level, inflationary push and effect of market corrections. Consistent efforts are undertaken by the Company to retain critical talent in this highly competitive industry.
- 12.7.2. CESC has been discharging statutory obligation of maintaining various terminal benefit funds. Auditors' Certificate with respect to such terminal benefit funds have been placed in "Annex C10" (Page 274, Volume 3).
- 12.7.3. It is humbly submitted that, in terms of the Tariff Regulations, employee cost is an uncontrollable item and therefore any variation in cost is allowable through tariff. However, for generation function, number of employees (i.e. Man / MW ratio) is normative, which fixes the number of employees (own plus contracted) of a generating station for the purpose of tariff determination. When employee cost is uncontrollable but based on a normative number for generation, it emanates that for the generating stations, the Company is entitled to cost of employees worked out on the basis of the normative





number of personnel subject to principle of sharing in terms of the Regulation of Hon'ble Commission. Thus, the employee number has been claimed on normative basis with both own employees and contracted manpower in terms of Regulation 2.5.5, Schedule-9A, Item A., read with Notes iv) under Item A and the cost is furnished following regulations 2.5.5 as applicable and other relevant Regulations of the Hon'ble Commission. The details of manpower cost for own employees and contractual manpower has been furnished in Form 1.17(h) of Annex 1 (Volume 2 of this Petition). Relevant Auditors' Certificate on contractual manpower has been placed as "Annex C11" (Page 275, Volume 3) in this Petition.

#### 12.8. Interest

- 12.8.1. During the year 2023-24, due to various global as well as domestic factors, availability of capital and pricing thereof became extremely stringent, especially in the power sector. Moreover, liquidity position and credit availability in power sector has deteriorated significantly. The Company made necessary borrowings keeping in view the applicable Debt-Equity Ratio as per the Regulations for capital expenditure.
- 12.8.2. Through proper planning, deferment and optimisation, the Company could contain capital expenditure at Rs. 331 crores. Certificate on SBI MCLR is placed in this Petition (Volume 12).





# 12.9. Carrying Cost

12.9.1. Necessity of carrying cost partially arose due to pendency of finalisation of APR Orders from 2018-19 to 2022-23. Also, the shortfall arising for the year 2023-24 and the earlier years for which necessary petitions have been filed, necessitated carrying cost for temporary utilisation of short term borrowings and also funding requirement arising due to several external factors which has been acknowledged by Hon'ble Commission from time to time. Accordingly, Interest expense has been incurred and prayed for. Interest has been arrived at considering the 1 year SBI MCLR plus 250 basis points on the average balance. Computation of carrying cost has been shown in Attachment 3 to Form E(A) of Annex 1, in terms of the applicable Regulations. Moreover, it is humbly submitted that, the Company has preferred appeal before the Hon'ble APTEL in the APR matters for 2014-15 to 2019-20, Review Order for the sixth control period (2018-19 and 2019-20) dated 31.03.2023 (merged with Order dated 03.02.2022), the MYT Order for the seventh control period and MYT Order for the eighth control period. The Company has prayed interest on the amounts under appeal/ review.

# 12.10. Financing Charges

12.10.1. The Company has claimed Rs. 2412 lakhs as finance charges for 2023-24 in this Petition. In the MYT Order the Hon'ble Commission has disallowed charges relating to cash management services and directed to consider it with O&M expenses. In this context it is humbly submitted that, Cash/ Cheque Pick up charges are an



integral part of Banking Services all across the Country and accordingly included in 'Other Finance Charges'. It forms a part of fund clearing charges and is similar in nature of online collection charges. Thus, being in the nature of bank charges, it is included in the finance charges. Also, following Hon'ble Commission's advice, it has been the endeavour of the Company to be in continuous pursuit to control the cost of finances, benefit of which entirely goes to the consumers. Accordingly, financing charge is not always directly related to capital expenditure / loan drawal alone and involve various other factors including, loan facilitation etc. as detailed in Form 1.17 (c) of this Petition. Therefore, it is prayed before the Hon'ble Commission that the actual amount claimed in this Petition is considered allowable. Auditors' Certificate for finance charges for the year 2023-24, as directed by the Hon'ble Commission is enclosed as "Annex C12" (Page 276, Volume 3).

# 12.11. E-payment Gateway Service Charges

12.11.1. In terms of Regulation 8.5.4 of the Tariff Regulations, applicable e-payment gateway service charges for payment of bills by the consumers using e-payment gateway to the service providers are to be borne by the distribution licensees. Therefore, such charges amounting to Rs. 1024 lakhs have been claimed accordingly in this Petition. This is uncontrollable in nature and therefore may kindly be allowed at actuals.





## 12.12. Fuel Sourcing

- 12.12.1. Submissions relating to fuel sourcing issues have been made through the Petition dated 17 October 2024 for FPPC Petition and are not repeated herein to avoid prolixity. It is respectfully submitted that the FPPC Petition was submitted within the timeline specified in the Tariff Regulations. The Hon'ble Commission may kindly refer to the FPPC Petition for submissions on fuel and power purchase costs. All necessary forms and computations are however repeated in this Petition for ease of reference of the Hon'ble Commission. However, some paragraphs are reproduced below in light of the documents submitted in this Petition.
- 12.12.2. Captive coal was mined to the extent possible. Some uncontrollable factors hindered production, which include rapid spread out of fire in and around areas of coal seam close to working areas, restrictions imposed by the Directorate General of Mines Safety ("DGMS") on blasting in some parts, difficult geographical terrain inside the mines resulting into deeper sections with narrower angles, necessitating use of smaller equipment, existing district board road through the mine which is being used as a thoroughfare etc. All such factors have made extraction extremely difficult at times and the issues have been regularly placed before the Appropriate Authority through monthly status reports / communications. Relevant communications / details have been placed in Volume 5 of this Petition.

12.12.3. Relevant details of requirement of coal washing for the captive mine have been placed in the Appendix in Volume 5 of the Petition.





- 12.12.4. In the context of no requirement of sharing of sale proceeds from washery rejects, relevant extract (Regulation 36P (2)) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2021 has been placed in the Appendix in Volume 5 of the Petition. Also, extract from MoC Washery Rejects Policy dated 27.05.2021 enunciating the same principle, is placed in the Appendix in pages Volume 5 of the Petition.
- 12.12.5. The relevant extracts of the Standard Tender Document (for Power Sector) dated 27.12.2014 are placed in Volume 5 of the Petition, which show that sizing/crushing charges, surface transportation charges etc. are additionally allowable apart from Rs. 100 per tonne of basic cost. The details of costs, statutory charges and Auditors' Certificates are placed in in "Annex C13" and "Annex C14" of Volume 3 of this Petition.
- 12.12.6. Answer by Minister of Coal and Parliamentary Affairs dated 07.08.2023 before the Rajya Sabha placed in the Appendix (Volume 5 of the Petition) to show that there had been no engagement of MDO in the Company's captive mine.

#### E-auction

12.12.7. Notification dated 01.03.2022 of CIL on merger of all types of coal auction is placed in the Appendix in Volume 5 of the Petition for kind reference of the Hon'ble Commission. Merger of all types of auction has increased the discovered price of coal. Details relating to



notices for e-auction, offer prices, sale intimation notices / sale orders containing price discovered in the bid, have been placed in Volume 5 of the petition for kind consideration of the Hon'ble Commission.

## Road-cum-rail is the primary mode of transport for E-auction

- 12.12.8. The MoC has formed the Infrastructure Constraints Review Committee to look into the coal shortage issues in thermal power plants. Reports of the sub group constituted by Infrastructure Constraints Review Committee, having representation from the MoC, MoP, the Central Electricity Authority, Railways, Coal Companies, NTPC etc. show that not only the Independent Power Plants ("IPP"), but the Public Sector Undertakings like NTPC Limited, DVC etc. were also encouraged to lift coal through RCR route and had concurrence / approval of the MoP and other government authorities. Kindly refer to Appendix (Volume 11 of the Petition). The road transportation cost was discovered through competitive bidding process and relevant details in terms of directions in this respect issued through tariff orders of the Hon'ble Commission for sixth and seventh control periods were complied with as applicable and furnished in Volumes 7 and 8 of the Petition.
- 12.12.9. Details of relevant documents of competitively bid road transportation and handling are placed in Volume 7 and Volume 8 of this Petition.
- 12.12.10. Co-firing of biomass pellets along with primary fuel coal happened in the current financial year 2023-24. The biomass pellets were

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primarily made up of agro-residues such as Rice Husk, Groundnut shells and Paddy Straw. About 49 Tons of biomass pellets were fired, which could be procured at a cost of Rs. 13598 / Ton. Heat value certificate of Biomass was issued through periodic testing by an NABL accredited third party and is placed in Volume 9.

## A. Fuel Quality

Regulations Acknowledge "GCV as received", not "As Billed"

- 12.12.11. Testing agency for measurement of heat value at receiving end has been selected from the list of CIL-empaneled testing agencies. The aforesaid list is placed in the Appendix (Volume 9 of this Petition).
- 12.12.12. The "Report of the Forum of Regulators on 'Analysis of Factors impacting Retail Tariff and Measures to address them'" submitted to the Hon'ble CERC in April 2021 have also observed that there exists significant grade slippage (>600 kCal/kg) in generating stations across the country. Relevant extract from the Report is placed in Volume 9 of this Petition.
- 12.12.13. In the Order in Case 132 of 2023 dated 01.02.2024, MERC has taken cognizance of the various challenges being faced by the generator in respect to grade slippage and the actual grade slippages for various years under the control period. Based on such considerations, MERC had allowed relaxations of 350 kcal/kg in loss of GCV in addition to 300 kcal/kg for 2023-24 and 2024-25. Relevant extract from the Order is enclosed in Volume 9.



- 12.12.14. Further, MERC in clause 51.6 of the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2024 published on 19.08.2024 has allowed a maximum allowable grade slippage of 750 kCal/kg between "GCV as billed" and "GCV as received" by the generating companies. The relevant extract is enclosed in Volume 9 of this petition.
- 12.12.15. It is respectfully prayed that difference between GCV 'as received' and GCV 'as billed' is a phenomenon prevalent across the country and have been allowed by different Electricity Regulatory Commissions under purview of their Regulations. Hence, it is respectfully prayed that grade slippage phenomenon has been affecting CESC significantly and based on the existing regulatory framework, due relaxations may kindly be provided by the Hon'ble Commission and the actual GCV of coal on "as received" basis (duly certified by an Auditors' Certificate submitted in "Annex C29" of Volume 3) be considered for determination of final allowable fuel cost for CESC as being prayed through this petition.
- 12.12.16. Copies of consignment wise quality certification at the unloading end by a CIL approved third-party agency for coal procured in 2023-24, have been furnished in pages 4 to 105 of Volume 9 of this Petition. An Auditors' Certificate, certifying grade-wise "GCV as received" for the year 2023-24 has been placed in pages 307, Annex C29, Volume 3 of this Petition.
- 12.12.17. Monthwise heat value certificate of LDO and other details are placed in pages 106 to 129, Volume 9 of the petition. An auditor's certificate on monthwise details of heat value for LDO as well as yearly heat





values for Budge Budge and Southern Generating stations is placed in page 306, Annex C28, Volume 3 of the Petition.

# B. Fuel Price - Numerous Components, Frequent Upward Revisions

- (a) The freight tables notified by the Ministry of Railways are placed in pages 8 to 10 of Volume 6 of the petition. Sample copies of the bills / railway receipts and a summary of railway freight based on such receipts are enclosed in pages 21 to 82 of Volume 6 of this Petition.
- (b) A detailed note and supporting documents regarding GST on captive coal has been placed in the Appendix in pages 296 to 329 of Volume 5 of this Petition.
- 12.12.18. Relevant supporting documents in adherence to the directives of the Hon'ble Commission in respect of identification of agencies for handling, sampling and such other similar works, to the extent feasible and practicable have been placed in the Appendix, in pages 1 to 349 of Volume 7 and pages 1 to 300 of Volume 8 of this Petition.
- 12.12.19. Copies of coal price notifications of CIL along with other related documents, royalty rates notified by the MoC, Government of India, railway freight notified by the Ministry of Railways, Government of India, terminal charge notified by the Ministry of Railways, GST Compensation Cess issued from the Ministry of Finance, Government of India, notifications under the amended Mines and



Minerals (Development and Regulations) Act, 1957 towards payment for District Mineral Foundations and National Minerals Explorations Trust, cess / charges imposed by the Government of Jharkhand along with some sample bills are placed in the Appendix in pages 261 to 332 of Volume 4 and pages 21 to 80 of Volume 6 of the Petition. Kindly refer to pages 56 to 60 and 71-74 of Volume 2 of the Petition, containing further references to the notification mentioned above. For captive coal, deductions have been made in terms of the statutory provisions; without considering adjustments relating to sale of washery rejects. Needless to mention that, all levies / royalties / cess and other charges on coal are allowable in terms of various directions / notifications of competent authorities and has been allowed in the APR-FPPCA Orders for FY16 to FY19. Relevant documents, relevant parameters relating to coal as per applicable forms of Tariff Regulations and price for captive coal have been placed in the pages 56 to 60 of Volume 2 of the Petition. Various requirements of the Regulations of the Hon'ble Commission have been adhered to in the coal procurement process including price therefor. It is respectfully submitted that duties, levies, cess etc. have been considered in terms of applicable statutes to arrive at cost of coal, duly certified by Auditors. Details of coal procurement and methodology followed for the same are furnished in the Petition (pages 144 to 153 of Volume 11).

12.12.20. Relevant certificates and audited data are collectively enclosed in "Annex C1" to "Annex C33". The Annual Accounts, audited by the statutory auditors, is submitted in the Appendix (Volume 3, pages 1

to 260).



12.12.21. It is respectfully submitted that the Petitioner has prayed for Rs. 565033 lakhs as FPPC towards variable cost for 2023-24 vide FPPC Petition dated 17 October 2024. The computations and relevant format and details have also been placed in this Petition for ease of referencing of the Hon'ble Commission.

## Electricity Rule of Government of India and its Implications

- 12.12.22. The Ministry of Power, Government of India notified the Electricity (Amendment) Rules 2022 on 29.12.2022 ("Rules"). These Rules amended the Electricity Rules, 2005 w.e.f. 02.01.2023. A copy of the said Rules is placed in Volume 9, pages 136 to 155 of the Petition.
- 12.12.23. The said amendment introduces Rule 14 in the Electricity Rules, 2005 providing for timely recovery of variation in fuel and power purchase cost through Fuel and Power Purchase Adjustment Surcharge ("FPPAS").
- 12.12.24. In terms of the said Rule 14, within 90 days of publication of the Rules, the State Commissions have to specify a formula for calculating FPPAS. Any existing formula already specified by any State Commission is required to be suitably amended in line with the Rules.
- 12.12.25. In terms of the first proviso to the said Rule, till such time the State Commission specifies such formula, distribution licensees are



required to follow the formula specified in Schedule II of the said Rules.

- 12.12.26. Within a short period after the coming into effect of the amended Rules (02.01.2023), the Hon'ble Commission came out with draft amendments to the Tariff Regulations on 24.01.2023. A copy of the draft amendments is placed in Volume 9, pages 156 to 211 of the Petition. On 17.02.2023, CESC by a letter provided comments to the Hon'ble Commission, relevant part of which is placed in Volume 9, pages 212 to 214 of the Petition. Thereafter the Tariff Regulations were finally amended and published. A copy of the relevant extract of the existing methodology and formula contained in the such Tariff Regulations is placed in Volume 9, pages 215 to 228 of the Petition.
- 12.12.27. Owing to certain difficulties being faced, CESC informed the same to the Department of Power and NES, Government of West Bengal by communication dated 09.02.2023, a copy of which is placed in Volume 9, pages 229 to 230 of the Petition.
- 12.12.28. Thereafter on 14.03.2023, CESC by its letter of date made representations to the Ministry of Power a copy whereof is placed in Volume 9, pages 248 to 249 of the Petition.
- 12.12.29. Owing to the facts and circumstances referred to in the letters above, CESC informed the MoP on 30.03.2023, that in deference to the said Rules and subject to the limitations described therein, FPPAS has been computed by applying the percentage on the individual consumer's bill, in terms of a pari materia provision and interpretation thereof provided by the Hon'ble Delhi Electricity



Regulatory Commission ("DERC") in para 4.115(e) of Tariff Order dated 30.09.2021. Relevant excerpts of the said Tariff Order of the Hon'ble DERC dated 30.09.2021 is placed in Volume 9, pages 252 to 257 of the Petition. By the same letter, the Ministry was also informed that though the amount would be computed and reflected in the bill, the collection would be kept in abeyance till clarity emerges on the methodology from the Ministry.

- 12.12.30. On the very next day, after the aforesaid communication, on 31.03.2023, CESC also informed the Hon'ble Commission that applying the aforesaid interpretation, it has computed the FPPAS in terms of the formula prescribed in the said Rules to the best of its understanding by applying the derived percentage on the individual consumer's bill to be reflected in the next cycle of bills, however, though the amount would be computed and reflected in the bill, its collection would be kept in abeyance till clarity emerges on the methodology from the Hon'ble Commission.
- 12.12.31. Accordingly, CESC computed the FPPAS in terms of the interpretation that CESC thought most reasonable and appropriate under Rule 14 and started computing and reflecting the same in individual bills by way of intimation to consumers but kept collection of FPPAS in abeyance and individual consumers were duly informed of the same in their respective bills and on CESC's website. Copies of Auditor's certificate on computation are placed in Volume 9, pages 261 to 272 of the Petition. A sample copy of such intimation to consumers through the website is placed in Volume 9, pages 273 to 296 of the Petition.





- 12.12.32. The aforesaid events and circumstances led to non-collection of the FPPAS in spite of computing and reflecting the same in individual bills. After computing and reflecting such FPPAS according to its own interpretation, CESC could not collect FPPAS under these extenuating circumstances.
- 12.12.33. By reason of the facts stated above, CESC was unable to collect the FPPAS in spite of exercising due diligence and reasonable care and complying with prudent utility practices.
- 12.12.34. In these circumstances, CESC humbly submits that while truing up for the FY 2023-24, the Hon'ble Commission should consider as allowable, the entire amount of Fuel and Power Purchase Cost Adjustment not collected from consumers in this period.

#### 12.13. **Bad Debt**

Bad Debts for the year 2023-24 have been duly approved by the Board of Directors in its meeting held on 23 May 2024, through approval of the Annual Accounts of the Company. Relevant Auditors' Certificate is furnished in "Annex C5" (Page 269, Volume 3). The figure represents amount actually written off. In the MYT Order, the Hon'ble Commission has not allowed any amount as Bad debt and allowance of the same has been deferred at the APR stage on the basis of audited numbers. It is humbly prayed before the Hon'ble Commission that the actual amount of Bad Debt certified by auditors, as prayed for in this Petition, may be allowed accordingly.





#### 12.14. Income Tax

12.14.1. Auditors' Report and Certificate for the actual payments on account of Income Tax for financial year 2022-23 is submitted in "Annex C16" (Page 280, Volume 3) and the amount is prayed for accordingly. As per consistent practice, payment on account of Income-Tax for the financial year 2022-23 and earlier period(s) (not included in the petitions so far) will form part of future claims on account of Income Tax and will be included in the APR petition for 2023-24. The Income Tax Assessment has been completed upto FY 2022-23.

#### 12.15. Reserve for Unforeseen Exigencies

12.15.1. The Company has not appropriated / claimed any sum towards reserve for unforeseen exigencies as in the Tariff Order for the year under review such appropriation was not allowed. Interest of Rs. 21.12 crores has been ploughed back as directed. The Auditors' Report and Certificate in this respect is furnished in "Annex C17" (Page 283, Volume 3).

#### 12.16. Performance Based Incentive

12.16.1. The essential characteristic of the Regulations framed by the Hon'ble Commission is to usher in a performance based system with scope for incentivisation as also to provide a reasonable degree of regulatory certainty.





12.16.2. "The principles rewarding efficiency in performance" has been recognised in the Electricity Act, 2003 as one of the major guiding factors for determination of tariff. The relevant Regulations of the Hon'ble Commission also echo the same. The Hon'ble Commission has adopted the principle enshrined in the National Electricity Policy:

"5.8.5. All efforts will have to be made to improve the efficiency of operations in all the segments of the industry. Suitable performance norms of operations together with incentives and disincentives will need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers. This will ensure protection of consumers' interests on the one hand and provide motivation for improving the efficiency of operations on the other."

Extracted from the National Electricity Policy issued under Section 3 of the Electricity, Act 2003.

12.16.3. The Auditors' Report and Certificate on details of generation for the year 2023-24, including Plant Load Factor achieved by CESC is placed in "Annex C18" (Page 287, Volume 3). Auditors' Report and Certificates on consumption details of coal and oil for the year 2023-24, are placed in "Annex C19" (Page 291, Volume 3). Relevant figures have been furnished in terms of Schedule-10 of the Tariff Regulations and the MYT Order dated 03.09.2024.

# 12.17. Equity Base

12.17.1. In terms of the Tariff Regulations and previous Orders, the opening equity base for FY2023-24 has been computed based on the closing equity base of 2018-19 as per the relevant APR Order, considering





30% of addition to fixed assets from FY2019-20 to FY 2022-23, net off capital contribution for the respective years. Such opening equity base for 2023-24 has been appropriately allocated to different functions. The closing equity base for 2023-24 has been obtained from the opening equity base of 2023-24, considering net additions during 2023-24. Return has been claimed on the equity base at the rates provided in the Tariff Regulations. In the MYT Order, the Hon'ble Commission has deferred addition to the asset base and as a result there was consequential reduction in the return on equity. It is humbly submitted that in this Petition the amount of return on equity has been computed in terms of the applicable regulations of the Hon'ble Commission based on the audited figures and hence such such amount may be allowed for the year under consideration.

#### 12.18. **Security Deposit**

- 12.18.1. Security Deposit is accepted from the consumers in terms of the applicable Regulations of the Hon'ble Commission. Entire interest payment has been appropriately settled. The Auditors' Report and Certificate is provided in "Annex C20" (Page 295, Volume 3) on Interest on Security Deposit maintained by the consumers for 2023-24. Interest on Security Deposit as indicated in the audited accounts (Note 38) in Annex C1 has been fully settled. A report on Security Deposit is placed in the Appendix (Volume 11).
- 12.18.2. Expenses pertaining to the licensed business and the generation business supplying power to the licensed business, as permitted under the relevant Regulations, have only been prayed for through this Petition with specific exclusions of expenses on account of



employee cost, legal and other overheads not directly attributable to the licensed area/ generation business, to the best of knowledge and information. As directed, a report in this respect is enclosed in the Appendix (Volume 11), confirming that the expenses pertaining to the Company's licensed business/ generation business for licensed area have only been considered in this Petition.

#### 13. Compliance with the Hon'ble Commission's Directives

- 13.1. The Hon'ble Commission has issued directives through Tariff Orders of different years and applicable Regulations from time to time. An itemwise summarised status report on the directives of the Hon'ble Commission is enclosed in the Appendix (Volume 11).
- 13.2. Apart from complying with the above directives CESC has published newspaper advertisements for application of new connection, customer grievance redressal information. The Company has submitted annual report on standards of performance relating to consumer services to Hon'ble Commission in terms of applicable regulations. Copies are placed in Appendix (Page 185, Volume 12).
- 13.3. As directed by the Hon'ble Commission, Auditors' Certificates with respect to demurrage details for 2023-24, break-up of legal expenses as included in profit and loss statement and relating to penalty / fine are furnished in "Annex C21" (Page 299, Volume 3), "Annex C22" (Page 300, Volume 3) and "Annex C23" (Page 301, Volume 3) respectively. Relevant Auditors' Certificates on benefit arising out of Auxiliary Service Income, User Fee Income and Consultancy Services are



places in "Annex C32", "Annex C33" and "Annex C25" respectively. The Company has preferred Appeals against the APR Orders for 2014-15 to 2018-19, Tariff Order dated 03.02.2022 in Case No : TP-77/ 18-19, Tariff Order dated 01.08.2022 in Case No : TP-96/ 20-21 and also against Order on Additional Levy before the Hon'ble Appellate Tribunal for Electricity. Also, a number of Petitions are pending before the Hon'ble Commission. All relevant entitlements arising on disposal of any of the aforementioned Orders should be given immediate effect for recovery through separate Order in terms of Regulation 2.6.6(ii).

#### 14. General

- 14.1. In accordance with the Regulations of the Hon'ble Commission, supporting materials and relevant information have been furnished in specified forms in the respective Annexes, to the extent applicable, along with the Appendix, which form part of this Petition. Power Purchase Agreements have been furnished in Volume 10 of this APR Petition. Detailed submissions on both revenue and capital expenditure, as well as other relevant issues, have been made through the Annexes, which are not repeated herein. The Company undertakes to make available such other or further information, particulars and documents as the Hon'ble Commission may consider appropriate and make a requisition thereof to the Company.
- 14.2. Since accumulation of arrears adversely affects the consumers and the licensee, the Company prays for liquidation of the recoverable amount, as furnished in this Petition, in entirety within a twelve-month period, in terms of the Regulations of the Hon ble Commission.



- 14.3. Applicable formats have been submitted for appropriate year with additional notes, data and reconciliations, wherever required for clarity, in conformity with the Regulations of the Hon'ble Commission. In order to retain appropriate focus, figures have been rounded off for final presentation in certain cases. All compliance requirements under the Regulations, as humbly understood and interpreted, have been met to the extent possible. The Hon'ble Commission may be pleased to refer to the Appendix for the relevant statements and compliance reports as required.
- 14.4. In terms of the applicable Regulations, Gist of this Annual Performance Review Petition is enclosed with this Petition for approval of the Hon'ble Commission before notification.
- 14.5. The Government of West Bengal (GoWB) has announced a new scheme named "Hasir Alo" in March 2020 and the said scheme has been implemented in terms of the Order of the Hon'ble Commission dated 31 March 2020 in Case No. A-6/14/G.0. Under the scheme, full subsidy (including meter rent) is to be provided to the "Lifeline Domestic" consumers with connected load upto 0.3 kW having quarterly consumption of 75 Units or monthly consumption of 25 Units. The scheme is effective from 1 April 2020 on prevailing tariff till further Order of the GoWB. The resultant shortfall of the licensee shall be compensated upfront by the GoWB in terms of Section 65 of the Electricity Act, 2003. Necessary auditors' certificate furnished in "Annex C26" (Page 304, Volume 3) and relevant communications/ Orders have been placed in the Appendix (Page 188, Volume 12).





- 14.6. It is brought to kind attention of Hon'ble Commission that a number of true-up Petitions, including review petition are pending before the Hon'ble Commission, *inter alia*, necessitating temporary utilisation of funds. Pendency of proceedings before the Appropriate Forum also added to the necessity for requirement of temporary utilisation of funds. Orders issued by the Hon'ble Commission in the past are yet to be fully recovered through tariff. Recovery of amounts arising from such proceedings may kindly be allowed to be recovered expeditiously, in terms of the applicable regulations.
- 14.7. Requisite fees in terms of the West Bengal Electricity Regulatory Commission (Fees) Regulations, 2013 for Annual Performance Review has been furnished. In terms of Regulation 2.6.1 of the Tariff Regulations, this APR Petition was required to be submitted by end of November 2024. However, due to various new information requirements and compliances that emerged from the fourth amendments to the Tariff Regulations and recent Orders of the Hon'ble Commission, the Petitioner is submitting the present Petition on 13.12.2024 and is praying for condonation of delay for the period of 13 days. The Hon'ble Commission has kindly advised the Petitioner that for granting extension of timeline, CESC shall submit its prayer under affidavit along with payment of requisite fees. Accordingly, the Company has made the payment of requisite fees. CESC prays that the Hon'ble Commission may kindly condone the delay for submission of this instant APR Petition being submitted with fees and Affidavit.





#### 15. Prayers

- 15.1. It is most respectfully prayed that the Hon'ble Commission may be pleased to:
  - (a) Condone the delay for submission of this Petition for the reasons stated under paragraph 14.7;
  - (b) Give direction for incorporating the total consolidated FPPC amount of Rs. 565033 lakhs as the amount to be considered during Annual Performance Review for the year 2023-24 or allowing recovering of the same separately earlier, in a manner the Hon'ble Commission deems fit and proper;
  - (c) Approve Rs. 487554 lakhs of Net Fixed Cost for the financial year 2023-24, after due reduction of claim on account of income other than sale of energy, benefits passed on to consumers in terms of Regulation 5.15 and adjustment of controllable factors in terms of the applicable Regulations;
  - (d) Confirm and approve the amount contained in Annex 1 as the allowable amount towards Annual Performance Review for the financial year 2023-24;
  - (e) Adjust the differential amounts arrived at through this Annual Performance Review, with the Aggregate Revenue Requirement of the subsequent year or allow separate recovery from the consumers, as considered appropriate by the Hon'ble Commission;



CESC LIMITED



- (f) Allow additional amounts to the Company for any increase in power purchase cost beyond what has been considered in the Petition, if applicable;
- (g) Early disposal of the Petition as the business of the Hon'ble Commission would permit;
- (h) Such further Order or Orders as the Hon'ble Commission may deem fit and proper;

AND THE PETITIONER AS IN DUTY BOUND SHALL EVER PRAY



পশ্চিমকুগ पश्चिम बंगाल WEST BENGAL

35AA 748644

# BEFORE THE HON'BLE WEST BENGAL ELECTRICITY REGULATORY COMMISSION, KOLKATA

FILE NO.

CASE NO.

### IN THE MATTER OF:

TION O

Application for Annual Performance Review for the year 2023 - 24 in terms of the Regulations of the Hon'ble West Bengal Electricity Regulatory Commission.



JANA CESC Limited

23 OCT 1024

PARTHA SARATHI CHOWDHUK)
Asyakar Shawan
F-7 Chowinghee Square
Kolkata-69

**AND** 

**CESC Limited** 

**CESC House** 

Chowringhee Square

Kolkata – 700001.

.....Petitioner

#### **AFFIDAVIT**

#### IN THE MATTER OF:

I, Jagadish Patra, son of Late Mr. Gajendra Nath Patra, aged about 54 years, by faith Hindu, residing at 16/C/2, Aasha Apartment, Tollygunge Phari, Kolkata – 700033, do hereby solemnly affirm and declare as follows:

- 1. That I am the Company Secretary of the applicant and have been acquainted with the fact and circumstances narrated in the application in respect of which the affidavit is sworn.
- 2. I have been authorised to swear this affidavit on behalf of applicant as I am competent to do so.
- 3. The statements made in paragraphs 1 to 3.1, 3.2.3 to 3.2.6, 3.2.8 to 3.3.9, 3.3 to 8.4, 9.2 to 12.5.3, 12.6 to 15 are true to my knowledge and belief and the statements made in the other paragraphs of the application are matters of records made available to me and based on information received which I believe to be true and correct.

Place: Kolkata

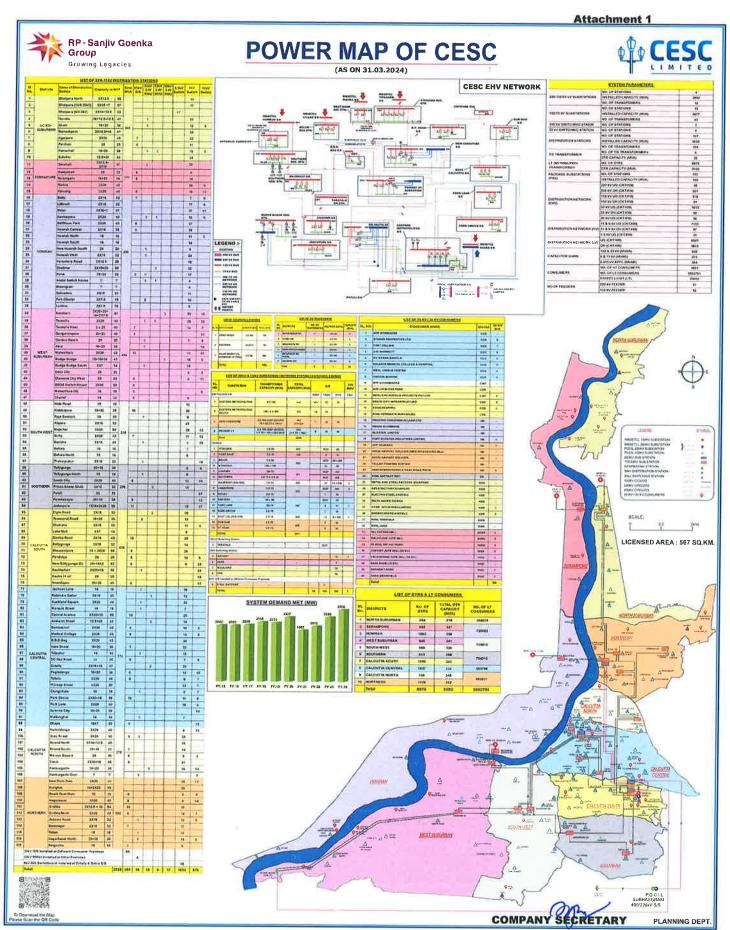
Date: 13HDecember 2024

me on Identification of Ld. Advocate

KAMAL KUMAR PARTIOTARY Love of India Regn. No.-2700/0

\* 1 3 DEC 2024

the ADVOCATE TO THE DAS Advocate
Regn No. - F-1322/21



#### **Attachment 2**

## Risk Analysis – Transmission vs. Distribution

Factors	Transmission Distribution	
Political Politicization of issues Dealing with several agencies Public Dealing Law & Order	Practically Severe No Risk Risk	
	Nature of service makes any issue related to Distribution more prone to politicization; Distribution requires dealing with larger number of authorities; has diversified and widely spread consumer base; is more dependant upon law enforcement machinery for curbing the menace of pilferage etc. Finally there are tariff issues.	
Recovery of Investment		
Certainty of Recovery	More certain Large collection risk	
Exposure to Market Fluctuations	Contracted Risky	
Recovery from Public Utilities	Contracted Very High Risk	
	Transmission Utilities have higher fixed charges, resulting in greater certainty of recovery; Further, Distribution is subjected to front-ended market fluctuations - recovery of dues from public utilities, in addition to various migrations with the Open Access, adds to such front-ended fluctuations	
Lenders' perspective	Higher Risk	
	Interest rates for Distribution agencies are typically higher	
Insurers' perspective	As all the perils are higher for Distribution,	
	insurance premium is also higher	
Demand Supply Gap	More Risky	
	Transmission Licensees being natural monopolies, any such gap is at best an opportunity while for Distribution, any supply deficit results in a threat from competitors as well as consequent penalties with reference to maintenance of service standards	



Factors	Transmission	Distribution
Open Access	No Risk	High Risk
		used competition with the risk onsumers, particularly with offive generation
Operation and Maintenance		
Pilferage control	Practically Absent Very High	
Complexity of Operation/ Infrastructure	Less	More
Adverse non-controllables	Absent	High
Manpower	Low	High
	Distribution involves higher complexity of operation with spread, demand growth and variability, fault detection etc; Adverse HT/LT ratio resulting in more losses; Pilferage control complexity which is virtually absent in Transmission; Huge diversity and wider degree of skill set for manpower compared to distribution	
Construction/Establishment of Network		
Choice of technology/ location		More
Ease of Setting up of Network Right of way		Far more difficult Far more difficult
	Reach of Distribution doorsteps	network up to consumers'
Off-take		
Placement in value chain		Complex Issues, more
N 1 C		significant
Number of consumers		Far Higher
Long term wheeling/ off-take agreements		Far Higher
Take or pay		More Risky
Billing/collection process		More Risky
	Retail end of business Universal Service Oblig	requires additional effort; ation not sufficiently backed ayment uncertainty due to
Extent of Regulation	Distribution is governe ambit with stricter penal	d by Regulations of wider consequences

Distribution is prone to more risk on all factors.



Southern Generating Station received Gold Runner up Award at 5<sup>th</sup> ICC National Occupational Health and Safety Awards 2023



Budge Budge Generating Station received Digital Transformation Award for "Innovative (Automated operation of Unit 3 Cooling Tower Blow down valve)" at CII DX Operational Excellence Awards 2023



Budge Budge Generating Station received 1st Runner up Award in the category of "Energy Intensive Group" at 16th CII Energy Conservation Awards (ENCON) 2022-23



Budge Budge Generating Station received Gold Award for "outstanding achievement in environment improvement" at 14th Exceed Green Future Award 2023





Budge Budge Generating Station received Winner Award for "Outstanding achievements in water management" at Global Water Awards 2023



Budge Budge Generating Station received Gold Award at Apex India Quality Excellence
Award 2023



Budge Budge Generating Station received Winner Award for "Energy Efficient Unit" at CII
National Awards for Excellence in Energy Management 2023



Budge Budge Generating Station received Winner award – Eastern Region for "Best ESG Initiative – Water Efficiency" at The Power-Gen ESG & Sustainability Awards 2023 by CEE



Budge Budge Generating Station received Platinum Award in the category "Large Enterprise-Power Sector" at 17<sup>th</sup> ICC Environment Excellence Awards 2023



Southern Generating Station received Gold Award in the category "Large Enterprise-Power Sector" at 17<sup>th</sup> ICC Environment Excellence Awards 2023



Budge Budge Generating Station received Winner award for "Best National Water Efficient Plant of the Year" at 2<sup>nd</sup> National Power-Gen Water Awards 2024 by Council of Enviro Excellence



Budge Budge Generating Station received Gold Award for "Water Stewardship" at Apex India Green Leaf Awards 2023





CESC attained First Position Award at 11<sup>th</sup> Innovation with Impact Awards for Discoms,
Organized by Indian Chamber of Commerce



CESC received Runner-up Award for "Best Performing Distribution Company" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)



CESC received Runner-up Award for "Best Distribution Company to Promote Consumer Awareness" at Power Awards 2023, Organized by Independent Power Producers

Association of India (IPPAI)



CESC received Winner Award for "Remote Job surveillance" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)





CESC received Winner Award for "Design and Implementation of Online Remote Monitoring Scheme" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)



CESC received Winner award for "AASTHA – The CESC Voice Assistant" at Power Awards 2023, Organized by Independent Power Producers Association of India (IPPAI)





THIS CERTIFICATE IS PROUDLY PRESENTED TO

**CESC LIMITED** 

WINNER

"LOSS REDUCTION AT B PILKHANA"

At the 23rd Regulators & Policy Makers Retreat held at Shoonya Farm Retreat, Belgaum, Karnataka

8" APRIL 2023

DATE





CESC received Winner award for "Loss reduction at Pilkhana" at Power Awards 2023,
Organized by Independent Power Producers Association of India (IPPAI)



COMPANY SECRETARY
CESC LIMITED

CESC received Winner award for India's Best Utility (Overall) – Power Generation, Transmission & Distribution at 16<sup>th</sup> ENERTIA Awards 2023, Organized by ENERTIA Foundation

120





CESC received Platinum award for EKLAVYA - CESC Skill Academy Project at Fame
National Award 2023 Organized by Foundation for Mass Accelerated Mass
Empowerment







The

#### ROLE MODEL AWARD

IS PRESENTED TO:

#### CESC Limited

for the 14th CII National HR Excellence Award, 2023 - 24

India

Indrani Kar Principal Advisor, CII & Hood CII.Suresh Neolia Centre of Evcellence for Leadership - LALE

Sanjay Behi Chairman, Cil National Committee on Leadership & HR & CEO & Executive Director, Greaves Electric Mobility

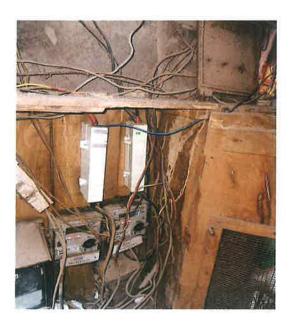
CESC received Role Model in HR Excellence Award at 14<sup>th</sup> CII National HR Excellence Award 2023-24, Organized by Confederation of Indian Industries











**Direct Connection** 



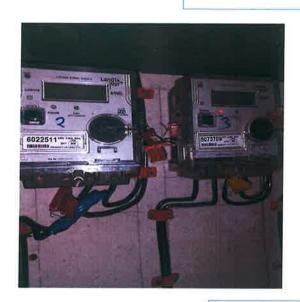




Meter body tampered



Meter tampered by making hole





Disconnection





Hooking from service cut-out



Hooking removal from Meter Pillar Box at Kamarhati



**De-hooking drive at Nager Bazar** 



De-hooking drive at Kamarhati area

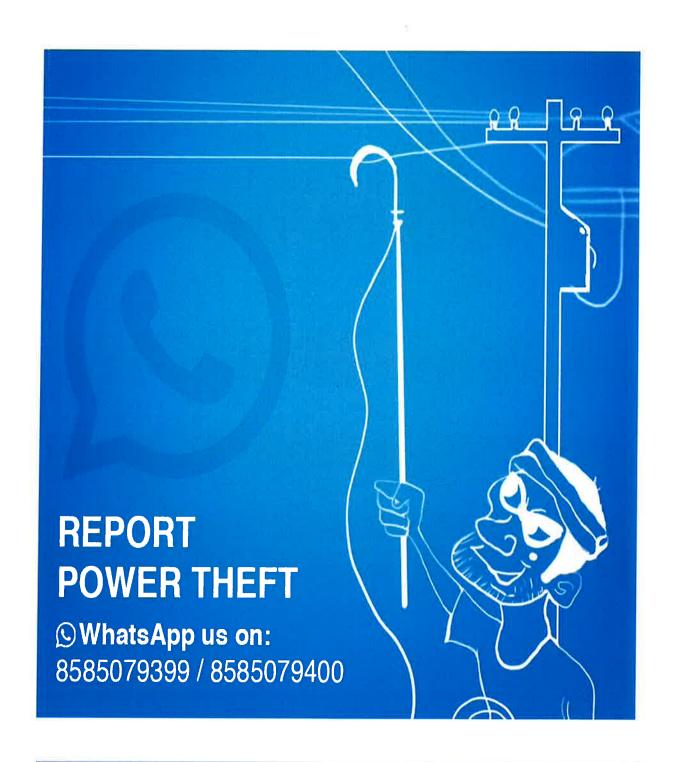


New connection camp at Ayubnagar area



Awareness campaign at Garden-reach area





Awareness on power theft reporting



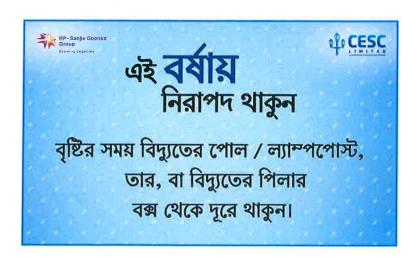






**Consumer service initiatives** 











Consumer awareness regarding safety protocol during monsoon







# Stay safe this Monsoon



#### **OUT OF HOME**

• During rains, avoid close proximity to electric poles & distribution box / kiosk, stray wires if any. • Stay away from electrical installations & loose / bare wires if any. • Avoid waterlogged areas for your personal safety. • Do not touch any metallic support during rains & water logging. • At the workplace, do not forget to switch off ACs or other electrical equipments, when not in use.

#### AT HOME

- Periodically check house wiring and switches & replace your old and frayed wires.
   Ensure proper insulation & earthing of your internal premises wiring system etc. Use 'Earth Leakage Circuit Breakers' for protection.
   Never touch electrical switches and appliances with your wet hands.
- Never use mobile phones while charging them. Do not neglect indication of any burnt smell / mild shock from electrical switches / appliances. Switch off immediately & call a Licensed Electrician.
- During thunderstorms, heavy rains and lightning, switch off your electrical gadgets and unplug them from the wall socket. Avoid touching any dangling conductors or wires.
- Do not spread-out wet clothes on metallic wires. Avoid drawing extension wires along metallic grille / windows.

For any emergency in CESC serviceable area Call 033 3501 1912 / 033 4403 1912 / 1860 500 1912 / 1912

Consumer awareness regarding safety protocol during monsoon







Intimation to consumers regarding bill payments



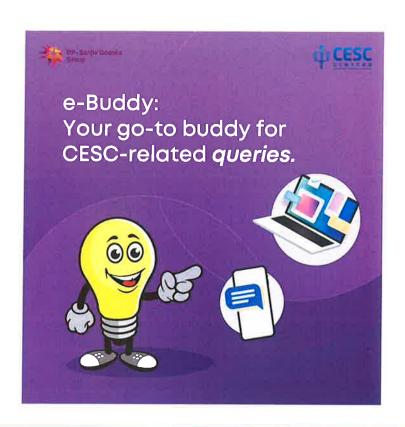




# STAY COOL STAY SMART

Additional AC load made easy with CESC





Intimation to consumers regarding extension of load and CESC related queries







Consumer service initiatives regarding ease of payments of electricity bills







Posters regarding safety of consumers during monsoon season





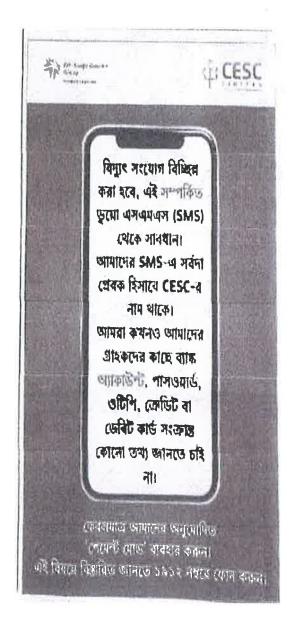


Consumer service initiatives regarding safety of consumers









**The Indian Express** 

**ABP** 

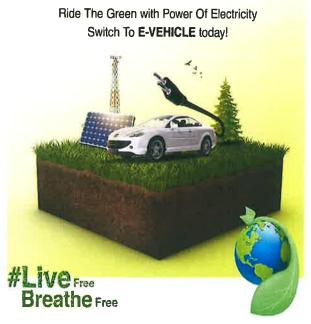
Awareness regarding fake messages of power disconnection





CHANGING NAME IN YOUR ELECTRICITY BILLS
IS NOW AT YOUR FINGER TIPS!
visit cesc.co.in





**Consumer service initiatives**