

Petition for Annual Performance Review for the year 2020-21

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 2020-21

**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 2020 - 21 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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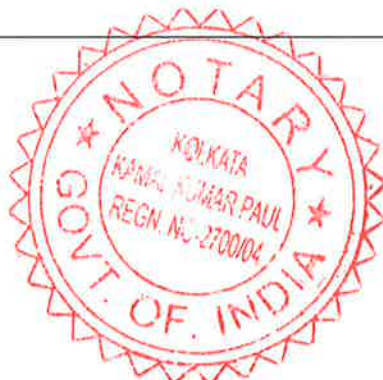


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○ Budge Budge Generating Station received Platinum Award towards Excellence in Best Practices to Fight Against COVID-19 at Fame Excellence Award 2020	
○ Southern Generating Station received silver award at National Occupational Health & Safety Awards 2020 organised by Indian Chamber of Commerce	
○ Budge Budge Generating Station received Corona Warrior Award 2020 for Corona Protection Initiatives organized by Greentech	
○ Southern Generating Station received special Jury Appreciation on Prevention Strategy for Covid-19 at Workplaces organised by Occupational Health & Safety Expert Panel of India Chamber of Commerce	



- Budge Budge Generating Station received first prize in platinum category at 8th FICCI Quality Systems Excellence Award 2020
- Budge Budge Generating Station received Gold Award in Safety & Well-being at Workplace at 9th FICCI Safety Excellence Awards & Conference for Industry
- Budge Budge Generating Station received Certificate of Merit at BEE - National Energy Conservation Award (NECA) 2020
- Budge Budge Generating Station received Gold Award for outstanding achievement in Water Stewardship - APEX India Green Leaf Award 2019 for Water Stewardship organized by Apex India Foundation

CESC House has been recertified as "LEED Platinum" in November 2020 by US Green Building Council under Version 4.1 Dynamic Arc Platform



◆ **Photographs**

- Consumer Service Initiatives

- E-initiatives to connect to consumers

- Communications to consumers regarding safety measures during monsoon season

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- Approach towards curbing theft of electricity: Detection, Anti-theft Drives, Awareness Campaign



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Application for Annual Performance Review
for the year 2020-21

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

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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.




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- 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 has submitted the Petition for determination of Annual Revenue Requirement ("**ARR**") and tariff for the years 2020-21, 2021-22 and 2022-23 under the seventh control period on 10 September 2020, 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 has issued the Multi Year Tariff Order (hereinafter referred to as "**MYT Order**") for 2020-21 and 2021-22 on 1 August 2022 in Case No. TP-96/ 20-21. 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**") of the concerned year with statutory audited data and a copy of the audited Annual Accounts for 2020-21.
- 1.5. The Hon'ble Commission issued the Multi Year Tariff Order for 2018-19 and 2019-20 on 3 February 2022 in Case No : TP-77/ 18-19. In line with the said Order, CESC submitted the Petition for approval of FPPCA for the year 2020-21- vide communication No. MD(G):351 dated 31 March 2022, which




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was submitted on 1 April 2022, in 7 volumes and also a Supplementary Petition for the year 2020-21 vide communication No. MD(G):385 dated 29 September 2022, which replaces Volume 1 of the FPPCA Petition (hereinafter collectively referred to as the “**FPPCA Petition**”), necessitated by the issuance of pending APR Orders for the period 2014-15 to 2017-18 as well as the MYT Order, modifying certain principles of determination and incorporating several new requirements.

- 1.6. During 2020-21, the year under consideration for the present APR Petition, the Company has recovered revenue in terms of and as directed in the Tariff Order of the Hon'ble Commission dated 4 July 2018 for the year 2017-18 in Case No. TP-72/16-17 read with the Tariff Regulations, as Tariff Order for 2018-19 and 2019-20 and the MYT Order for the year under consideration were issued after 2020-21 was over.

2. Overview of CESC's Licensed Operations

- 2.1. CESC is in the business of electricity distribution for over 123 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**” (Page 124, Volume 1).




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2.2. Presently, the Company serves more than 35 lakh consumers in its licensed area. Maximum demand of 2339 MW recorded in April 2022 is the highest demand ever met by CESC system. Peak demand surpassed 1800 MW on quite a few occasions in summer of 2020-21. The Company has, however, witnessed severe demand disruptions in the wake of the pandemic Covid-19 and lockdown induced by such pandemic, followed by lower usage of electricity, particularly in industrial and commercial establishments even post-lockdown. Meeting the consumer demand has 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



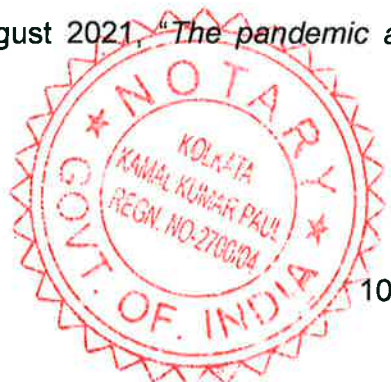

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activities are not available/ delayed, there is a negative impact both on the Company's finances as well as its ability to service its customers.

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 brought 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*




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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**" (Page 125, Volume 1).

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.

3.2.4. According to a report sponsored by Niti Aayog on study of distribution sector in India published in April 2019, 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. 67917 crores of overdue payments of generating companies from distribution licensees as on March 2021, as per the Report published by NITI Aayog in August 2021.




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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. Necessary information has been sought vide Order dated 23 September 2019 from the Forum of Regulators in this regard to ensure compliance of the above directions. 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. Reportedly, growth of electricity demand in the country was already experiencing a decline, which got further accentuated with the Covid-19 induced lockdown. 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. Covid-19 has impacted the sales mix of Indian distribution licensees and due to insufficient recovery, the entire sector is in dire straits.




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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 2020-21, about 20.13 lakhs of consumers of CESC accounted for around 909 MU sales – a meagre average sale of around 38 units a month per consumer. About 60% of consumers are in this category and account for about 10% 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. The Company has continued providing 24X7 power supply to all its consumers during the Covid-19 lockdown despite not being able to read the consumer meters and raise bills on the basis of actual electricity consumption and also kept disconnection process in abeyance for the time being. The Company, could not physically read the meters between




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23 March 2020 to 7 June 2020. Even after commencing of physical meter reading from 8 June 2020, it had been constrained by circumstances to keep in abeyance from collection, that portion of the consumption pertaining to earlier months which was not billed in the respective months on account of low provisional billing in those months.

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.




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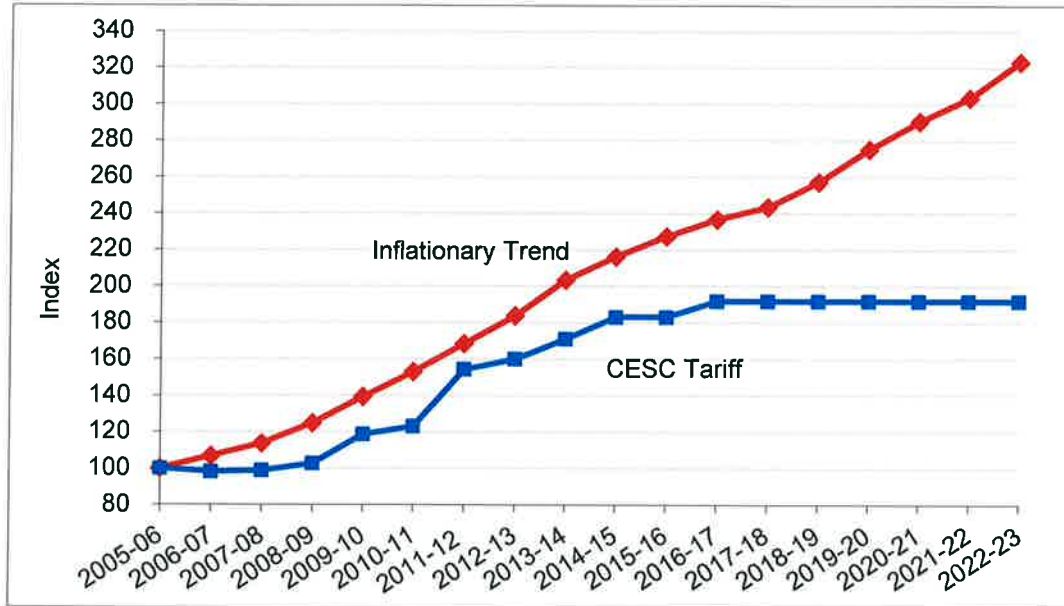
3.3. Macroeconomic factors affecting power sector

- 3.3.1. The economy has faced unprecedented slowdown in the wake of Covid-19. The pandemic had left its impact on all walks of life, including the business and operations of the Company.
- 3.3.2. Poor financial performance of power sector has affected the banking industry. In order to recognise the bad loans / NPAs, a significant portion of which was contributed by the power sector, the banks were forced to create huge provisions for the NPAs. With power / infrastructure sector creating large amount of NPAs, availability of fresh loan became dearer. A large part of the advances provided to power sector either required to be restructured or lying as non-performing assets (NPA) with the banks. 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. 482965 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.
- 3.3.3. While CESC has endured the inflationary pressures well in the past through sustained performance improvement, the same impacted the Company adversely.




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Chart: 3.1 Movement of Consumer Price Index (CPI)



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

3.3.4. 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.

3.3.5. The Company have been exploring various ways and means to contain interest cost at a manageable level and pursuant to protracted negotiations, the Company could manage to keep its average interest rates well below the SBI MCLR plus allowable margin. Considering involvement of several factors and with a high degree of uncertainty



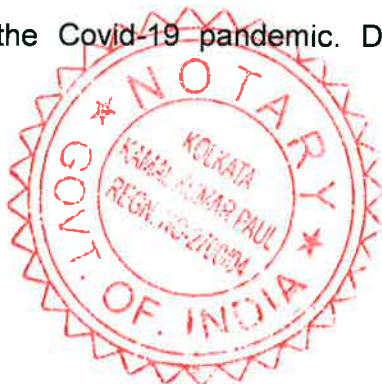

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prevailing in this sector, there is high financial risk in future. Certificates on SBI MCLR movement are placed in this Petition (Page 18, Volume 5).

3.4. Adverse impact of Covid-19 pandemic and Super Cyclone Amphan

3.4.1. The Covid-19 global pandemic gathered momentum in India in March 2020, resulting a strict nationwide lockdown for a prolonged period. The licensed area of CESC was under strict lockdown from 23 March 2020. This crisis facing the world is unique in terms of the quantum of output loss as countries restricted mobility and economic activity to contain spread of the pandemic. Besides, there had been severe uncertainty around the duration and intensity of the crisis, which resulted in a huge negative impact on the global and Indian economy, as well as on the power sector in which CESC operates. The lockdown has not only affected the Company's financial position to a great extent, but also imposed major constraints on all the functional activities of the Company.

3.4.2. Amidst wide-spread outbreak of the Covid-19 pandemic, the Super Cyclone 'Amphan' struck Kolkata and nearby areas on 20 May 2020, causing substantial damage of CESC's distribution network, especially the overhead networks and installations of the generating stations. However, CESC could restore entire supply within a short time, deploying additional manpower, even at the time when mobility was restricted due to the Covid-19 pandemic. Details with respect to the impact and




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necessary adjustments, as directed through MYT Order of the Hon'ble Commission, is placed hereunder in paragraph 12.13 relating to Unforeseen Exigencies.

3.4.3. Significant additional expenses have been incurred to meet various operational requirements, conforming to relevant Government advisories / social distancing norms and safety of consumers / employees. Particular emphasis has been given on critical operations like seamless generation from Budge Budge Generating Station, system operations and distribution services to ensure reliability of supply. Expenditures have been reported in the Petition specifically as directed by Hon'ble Commission in the MYT Order. Relevant Auditors' Certificate has been placed in Volume 3, Page 247 of this Petition.

3.5. Regulatory uncertainty

3.5.1. 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




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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.

- 3.5.2. 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.
- 3.5.3. 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.
- 3.5.4. 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



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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.

3.5.5. 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 (69% of generation in India is coal based). Around 78% of coal produced in India is consumed for power generation.

3.5.6. As a fallout of the Judgment and Order of the Hon'ble Apex Court of India dated 25 August, 2014 and 24 September, 2014 respectively in the matter of coal block allocation by the Government of India many coal blocks were de-allocated. CESC has been apprising the Hon'ble Commission of all relevant developments pertaining to coal 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




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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

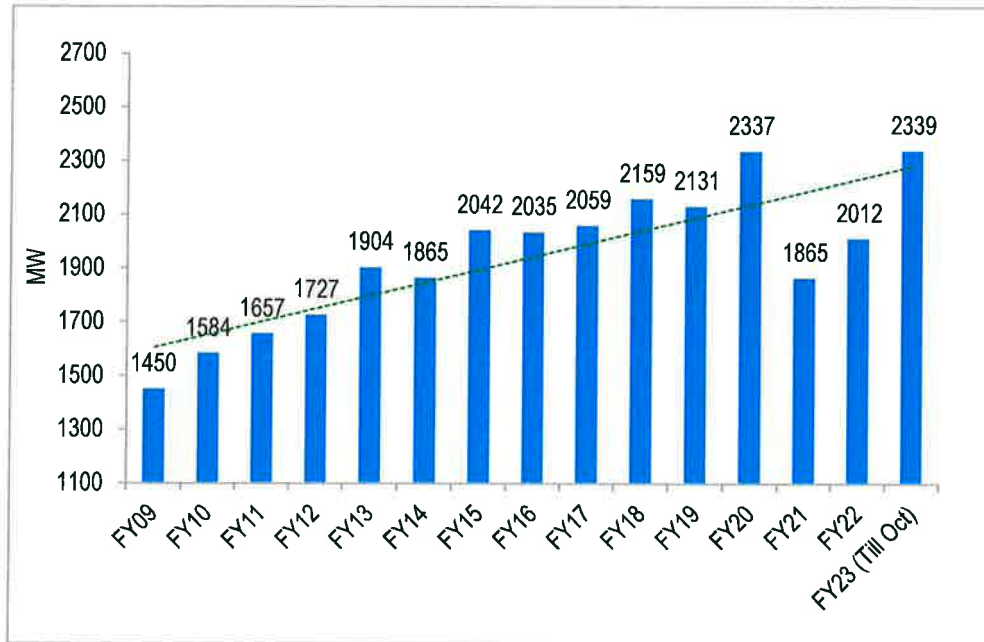
4.1.1. CESC system has been steadily witnessing significant growth in peak demand. Maximum demand reached 2339 MW in April 2022, which was the highest demand ever met by CESC system. The following chart reflects the steady increase in peak demand in CESC licensed area over the last few years. Catering 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.




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Chart: 4.1 Movement of Maximum Demand of CESC System



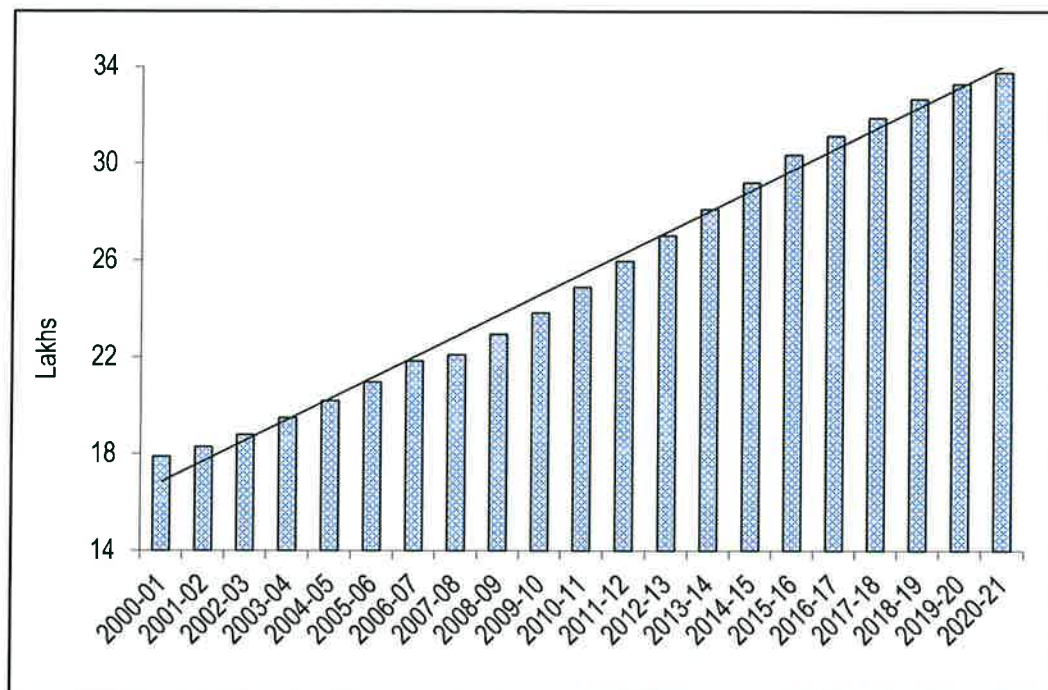
Maximum Demand got affected in FY21 and FY22 due to reduced consumption levels driven by Covid-19 imposed lockdown.

4.1.3. Vertical growth is taking place in and around the city. Consumer number was about 33.8 lakhs by the end of the year 2020-21 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. It may be pertinent to mention that, though the maximum demand and the energy requirement were reduced due to the impact of Covid 19 pandemic, but the number of consumers continued to show an increasing trend and the Company had to provide all necessary services to such a high consumer base.




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Chart: 4.2 Movement of Consumer Numbers

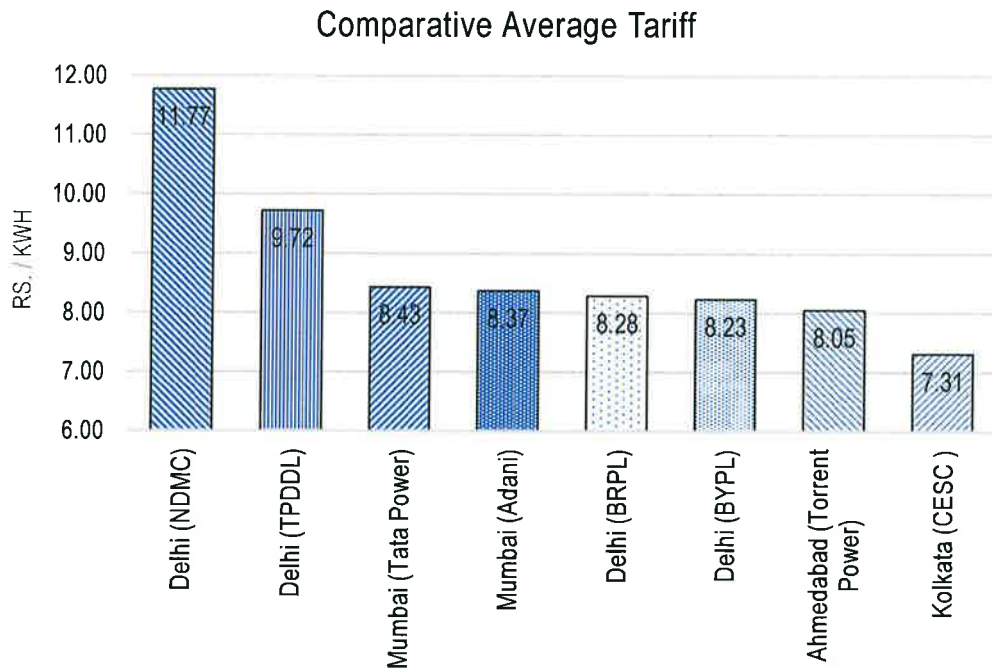


4.1.4. The Hon'ble Commission is kindly aware that for fulfilment of such a high demand in the licensed area, the Company depends on both long term and short term power sources. Accordingly, CESC system requires augmentation of its distribution backbone and also creation of provisions for bringing in power from the sources. As there are little possibility of renewable generation within the licensed area, the requirement of bringing power from outside will also increase with increase in RPO targets. This will necessitate creation of new network or strengthening of existing network for wheeling of such power into CESC system.




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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 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




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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 based on the current proceedings before appropriate forum, details of which are already placed in the FPPCA Petition and not repeated for prolixity. 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 4492 MVA as on March 2021. 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).




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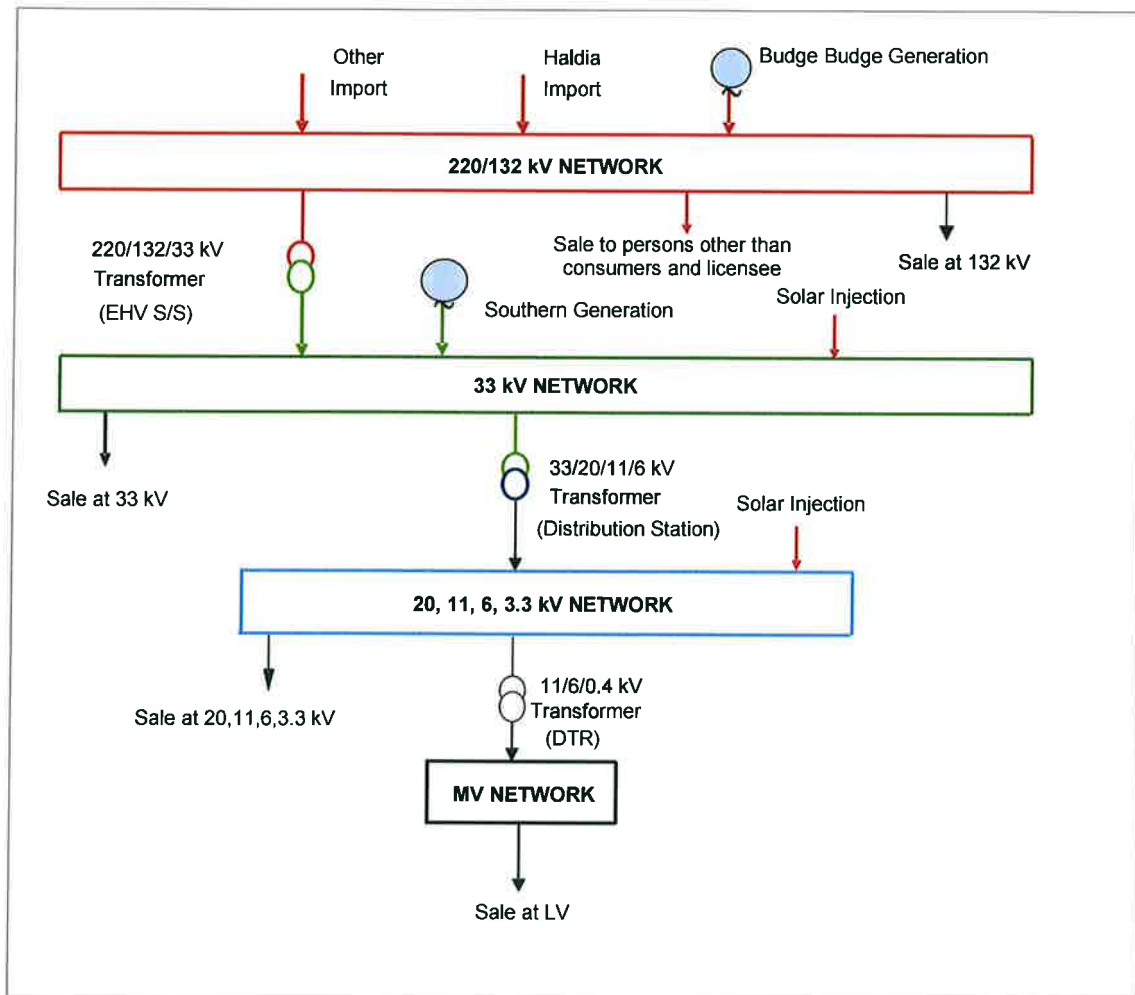
4.2.3. There are 1806 consumers, supplied at 11 / 6 kV. CESC also has a few consumers supplied at 20 kV and 3.3 kV due to its past legacies. Thereafter, electricity is transported to the local distribution centres where it is transformed to 400 V / 230 V through DTRs. 400 / 230 V (MV / LV) consumers are supplied through MV feeders emanating from distribution transformers. Millions of consumers are supplied at these voltages. There are 8749 DTRs in CESC's licensed area with total transformation capacity of 3064 MVA.

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




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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 2020-21 is given in the following table. In the year 2020-21, 133 MVA transformation capacity has been added in the network and total network length increased by 349 ckt. km.




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Table 4.1 Distribution Capacity of CESC Limited as on 31.03.2021

Voltage Level	Transformation Capacity (MVA)
220 / 132 / 33 kV	1440
132 / 33 kV	3052
33 / 11 / 20 / 6 kV	3898
11 / 6 / 0.4 kV	3064
Voltage Level	Network Length (ckt. km)
220 kV	268
132 kV	398
33 kV	1651
20 / 11 / 6 / 3.3 kV	7111
400 V	13798

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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- (a) Primary high voltage distribution system largely at 6 kV instead of 11 kV, with consequent higher technical losses.
- (b) 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.




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5. Distribution Loss

5.1. It is a well-known and acknowledged fact that 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

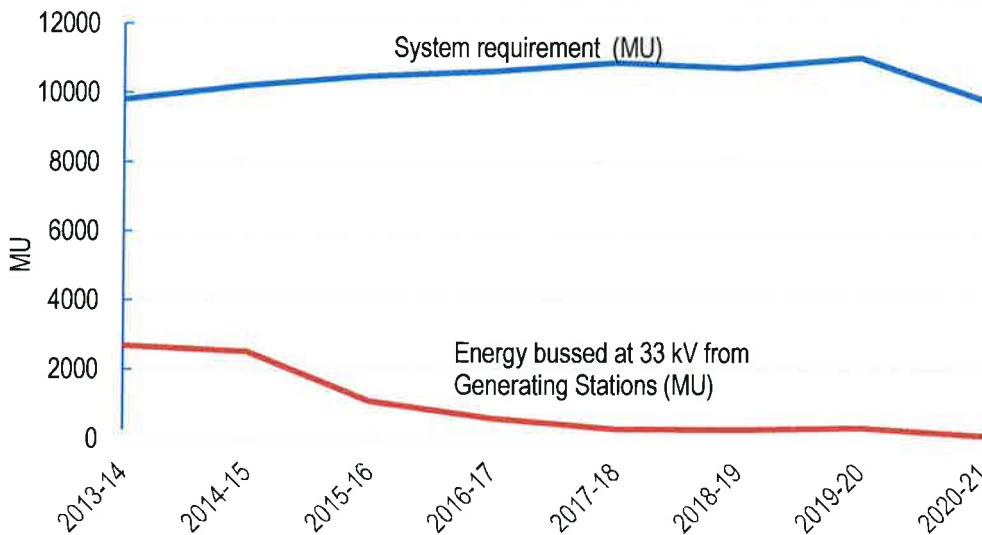
5.3.1. CESC has an embedded network of extra high voltage (EHV) system comprising 132 kV and 220 kV lines in its distribution network. Therefore, distribution loss of CESC includes technical loss incurred in this EHV network also. Such loss has further accentuated with new sources coming




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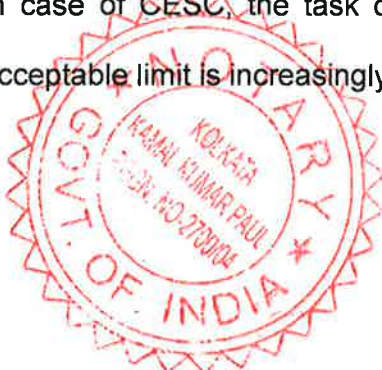
up at a considerable distance from the load centres, increased RPO requirement necessitating bringing renewable energy from outside and decreasing contribution from load centre based generating stations on account of environment, vintage and other issues, already on the records of the Hon'ble Commission. The following graph shows decline in energy bussed at 33 kV from generating stations.

Chart: 5.1 System requirement vis-à-vis Energy bussed at 33 kV by the generating stations



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.

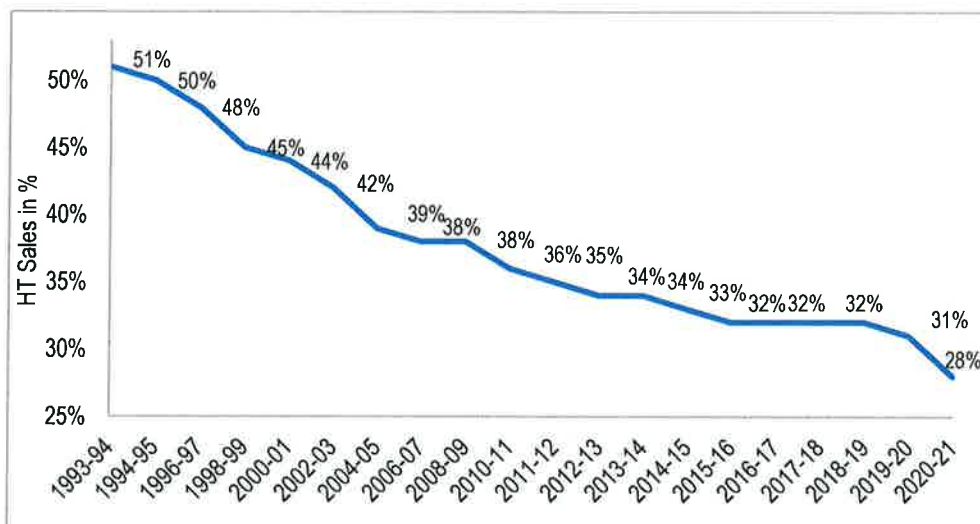
5.3.2. In case of CESC, the task of containing the distribution losses within acceptable limit is increasingly becoming challenging as the ratio of HT to




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LT sales is reducing over the years, from over 51:49 in the year 1993-94 to about 28:72 in the year 2020-21. 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: 5.2 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 to serve system growth, is available only at 220 / 132 kV, often at a distance from the load centre. 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




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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.

- 5.3.4. Other generating stations serving the licensed business are bussed at 33 kV and distributed locally. To serve the interest of the consumers, Titagarh is not being dispatched due to its high variable cost of generation. Dispatch from Southern Generating Station also operates on a protocol in the best interest of the consumers. Diminution / 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

- 5.4.1. Theft of electricity is a significant contributor of distribution loss in the country. As a primary reason of commercial loss, theft remains a major concern for the distribution licensees in the country. CESC's area of




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supply is not immune from this social menace which is beyond the control of the Company without administrative and judicial deterrents.

5.4.2. The lockdown period has adversely affected the Company's loss control activities and in absence of requisite surveillance due to lockdown related embargoes, loss control activities have become even more difficult for the Company. During this significant crisis due to Covid-19 outbreak, severe power theft is being observed in a few pockets of the licensed area leading to overloading and unbalancing of power distribution equipment like distribution transformers, road-side distribution cables etc. This rampant theft is severely impacting the Company's services obligation to provide 24x7 stable power supply.

5.4.3. 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. 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 a densely populated area, the risks are manifold and public lives in these areas are prone to huge danger for the benefit of a few miscreants.




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5.4.4. There has been no management inaction on the part of CESC - all possible actions legally available to CESC have been explored. Containing losses to the present level has itself 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 will be difficult for CESC to control the menace and the distribution loss percentage figures may show an upward tendency in the coming years.

5.4.5. In this respect the Company would like to highlight some related figures, which speak for itself. While the Company is continuously scaling up its activities, the dwindling administrative action is apparent from the poor number of court cases registered and arrests made.

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




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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:

- Capacity creation - 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.
- Primary distribution voltage upgradation - 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.




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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. LT Aerial Bunched Conductor Installation

- It is observed in some areas that the power is drawn directly from bare LT lines by hooking. It can be prevented by replacing the overhead bare LT lines with Aerial Bunched Conductors. CESC is already adopting such measures. Such cables are insulated and difficult to tap. Though it has been observed that consumers are indulging in tampering AB Cable and tapping it. Adequate administrative support to CESC would be essential in curbing this problem.




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5.5.6. 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.

5.5.7. 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.

5.5.8. Bus bar Protecting Paint

- In pilfer-prone areas, there is propensity to steal electricity by direct hooking from busbars of pillar boxes. CESC has applied busbar protecting paint in about 511 pillar boxes to prevent theft of electricity.




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5.5.9. 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 cut-outs 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 in theft prone pockets. For the purpose of energy audit, meter reading and monitoring is done at a remote place through GPRS (General Packet Radio Service) communication. 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.



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5.7. Actions taken for commercial losses containment

5.7.1. Metering

- Statistical Analysis System: CESC has developed a system for continuous monitoring / control by using Statistical business intelligence tool of Statistical Analysis System (SAS) to facilitate better surveillance practices on all categories of customers (Domestic / Industrial / Commercial) 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 2020-21, 3860 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.




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- 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 communication 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,




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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.



A blue ink signature of the Company Secretary.
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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:

- (a) Recording of total energy consumed in different parts of the system under audit.
- (b) 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



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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

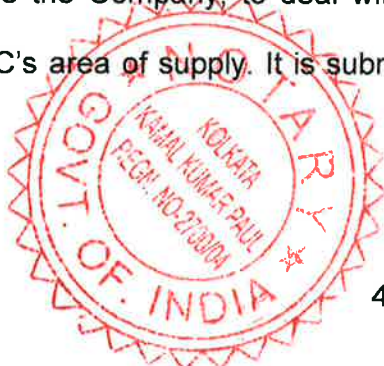



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gradually declining in CESC's licence area. Simultaneously, with increasing urbanisation and vertical growth, low voltage sales have been on the increase. All these factors, which are entirely beyond CESC's control, had a marked adverse impact on CESC's distribution loss. Covid-19 related disruption has affected the HT: LT ratio and also made physical loss control measures more difficult due to various embargoes.

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 thief 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 /




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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. There has been no management inaction in this respect. 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.




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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.
- 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.




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- Adjudged winner of 'ICC 6th Innovation Award 2018' under the category 'Efficient Distribution Operation'
- Received 'Assocham India Energy Excellence Awards 2019' for 'Innovation in Energy Solution'
- Innovative Development and Energy Excellence Awards 2018 - CESC has been recognized by Assocham, India in winning the project of 'Digital Transformation of meter inspection activity through Field Force Automation' under the category of 'Innovation in Energy Solution'
- Adjudged winner of 'ICC 7th Innovation with impact Award 2019' under the category 'Quality of Service and Customer Empowerment'
- Awarded under 'Project Evaluation & Recognition program 2019' by Frost & Sullivan for 'Cost Leadership (Service Sector)'
- Received CBIP Award for 'Best Performing Power Distribution Utility' organized by Central Board of Irrigation & Power in 2019
- Received 'National Award for Supply Chain and Logistics Excellence 2018' by Materials Division from CII Institute of Logistics
- Adjudged winner of 'IPPAI Power Awards 2019' under the category 'Best Performing Distribution Company'



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- Adjudged winner of 'IPPAI Power Awards 2019' under the category 'Best DISCOM to promote Consumer Awareness'
- Adjudged winner of 'IPPAI Power Awards 2019' under the category '– Innovation business models of T&D loss reduction in Loss Prone Pockets within Licensed Area'
- Received Platinum - CII EXIM Bank Award for Business Excellence 2019
- CESC emerged as the first runners-up at the 6th CII National Excellence Practice Competition on 'Customer Engagement & Satisfaction Practices' in the Power/Infrastructure category in 2018
- CESC has been adjudged as the 'Best Performing Utility in the Power Sector – Power Distribution, Transmission and Generation' in '12th Enertia Awards 2018'
- Awarded with "Manufacturing Supply Chain Awards 2019" – (a) "Operational Excellence in Procurement" and (b) "Strategy Excellence in Inventory Planning & Control"
- Recognised by the Great Place to Work Institute amongst the India's Best Workplaces in Manufacturing 2020




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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 38 units per month. Less than 10% of total units sold are consumed by about 60% 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 2020-21 alone, about 67000 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.




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6.5. Improvements in metering infrastructure

- 6.5.1. Almost all non-superior old electromechanical type meters have been replaced. 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 0.02% of the overall sales) for the year under review.
- 6.5.3. Coverage of AMRs increased significantly during the year. The coverage is being expanded in a phased manner to other bulk customers such as housing projects with over 20 metered supplies. 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.




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- (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.
- (b) The Company has strengthened the connection with Kasba 220 kV sub-station of WBSETCL by upgrading the voltage level from 132kV to 220kV. 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



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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, facilitate space savings and replacement of old equipment.
- 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.

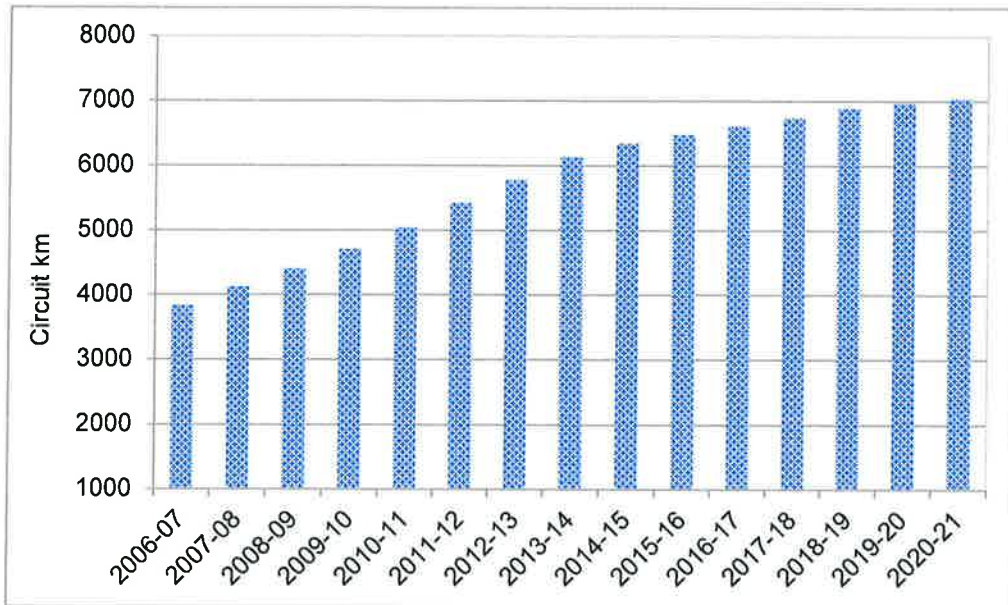
- (d) The Company undertakes continuous upgradation of the distribution infrastructure to provide safe and reliable power supply. These include commissioning of new distribution stations, augmentation of transformation capacities, upgradation of voltage level, establishing ring main connectivity and addition / replacement of the underground / overhead cable network along with use of modern equipment.




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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)



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Chart: 6.2: Secondary LT network (ckt km)

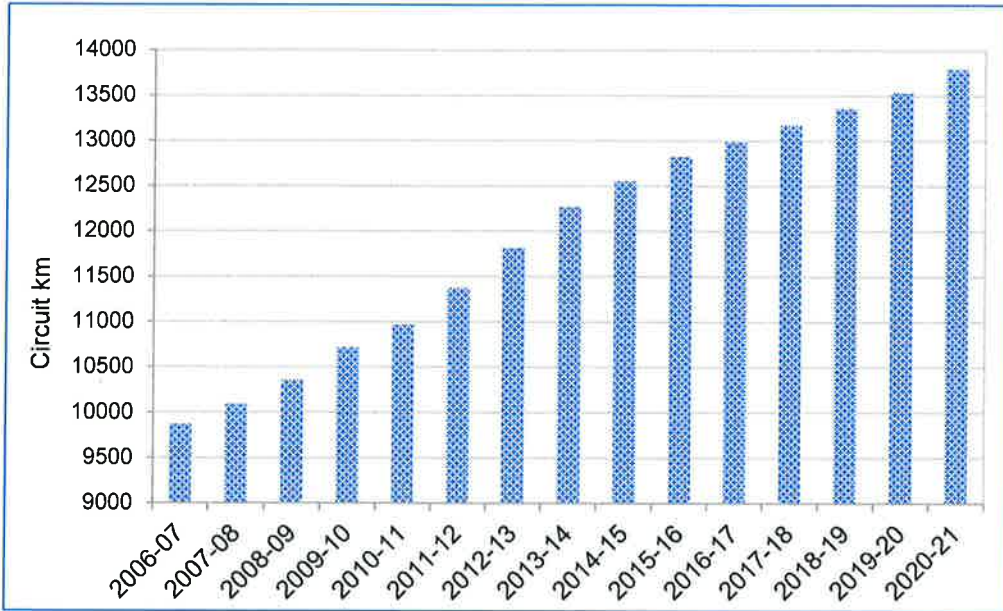
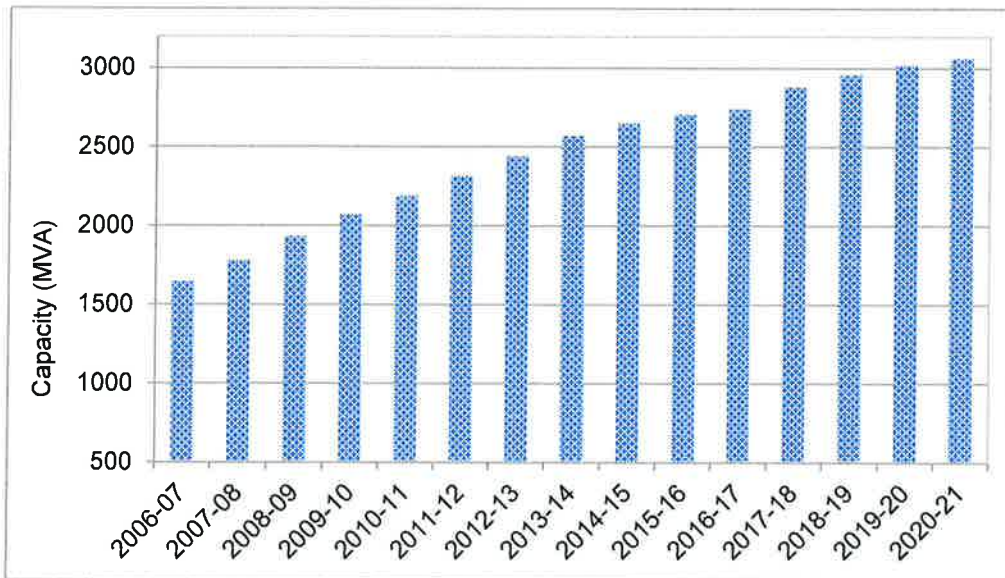


Chart: 6.3: Distribution Transformer Capacity (MVA)




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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.
- Fuse protection in CESC system was by means of re-wireable copper fuses at pillar boxes, pole cut outs and service cut-outs.

Supply interruptions due to fusing at pillar boxes were frequent and




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formed a major portion of the supply interruptions encountered by the consumers. Due to inherent nature of the re-wireable fuses, the fusing current for such fuses depend on a variety of factors such as condition of fuse contacts, the skill of the workman installing the fuse, fuse material and in service age of the fuse wire etc.

- 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.
- 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.




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(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. It is manned by selected domain experts, who monitor the operations in the LT System and ensure compliance within stipulated timeline for each critical process. It also acts as a Centre of Excellence by ushering in the latest technology and innovation in the LT system by regularly scouting the technology space and after proper trials and experimentations, embedding them in the system.
- 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 in DTR integrated with GIS: All the DTRs are provided with AMR. 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



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module to the pillar boxes, a process has been developed where in a SMS is triggered by the automation module during any outages.

- LT Compact Substation (LTCSS): Quite a few numbers of low voltage complaints are received every year by CESC. Such low voltage complaints are now being resolved, where ever possible, by installation of LTCSS. LTCSS essentially comprise of two components, namely a voltage regulator and a 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 set up a 315 kWh Battery Energy Storage System as a Proof-Of-Concept project to understand various applications.
- 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.



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- 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 to replace its old / outlived SCADA System. The new state-of-the art SCADA will comprise Energy Management System (EMS), Distribution Management System (DMS) and Outage Management System (OMS) to facilitate enhanced reliability and operational flexibility.




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- These efforts have resulted in further 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.

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 are given below:

(a) 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.

(b) High Frequency Current Transformer based online monitoring & localization of partial discharges in HT&EHT underground cables.




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- (c) Ultrasound Detection - Suited generally for the detection of surface discharges.
- (d) Transient Earth Voltage Measurement - Suited generally for indoor air insulated switchgear.
- (e) Radio Frequency Interference Scanning - Suited generally for outdoor installations.
- (f) Ultra-High Frequency Technique - Suited generally for SF6 gas insulated switchgear.
- (g) Thermographic Detection (Infrared Radiation) of hot spots in energized distribution equipment is carried out.
- (h) 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.
- (i) 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.



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7. Consumer Services

7.1. CESC is committed to delivering best-in-class services to its 3.5 million Consumers through innovative processes as well as effective deployment of technology and mobility solutions. In this context, CESC's approach is to continuously improve consumer experiences that will in turn be value-additions to the Company by creating its unique identity in the minds of the consumers, under the guidance of the Hon'ble Commission. This became even more relevant in 2020-21 as the Covid-19 pandemic disrupted normal operations, necessitating swift changes to adapt to the new environment and servicing Customers in a safe and secure manner. A number of initiatives have been introduced to improve Customer service, some of which are detailed below.

7.2. New connection to consumers

7.2.1. CESC added around 67000 new consumers during the year 2020-21. Applicants get an estimate of the necessary Security Deposit through a Cost Estimator available in the Company's website, even before making an application. The Online application process has been further simplified for the ease and convenience of the Applicants. Application system is fully online and 100% of the applications are received online.

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7.2.2. Challenging internal benchmarks have contributed immensely in reducing the time taken to provide a new connection. At present, supply is being offered within two days on an average after receiving a complete application from a prospective consumer and supply is connected within one day on an average after the necessary compliance by the consumer.

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

7.3.1. The Company provides different channels for reporting any problem that the consumers may face and they are free to choose any convenient method to lodge the complaint. Various options available to the consumers are as follows :

7.3.2. IVRS enabled Supply and Billing Call Centres

- The Company operates a 24-hour Call Centre (Telephone No.1912, 033-4403-1912 and 1860-500-1912) for providing services to solve supply related problems at the quickest possible time. To provide better connectivity to the Consumers, a new Helpline Number 033-3501-1912




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has been added. The Call Centre handles cases of supply breakdowns and other supply related complaints of the consumers.

- The Company operates a 24-hour HT Call Centre (Telephone No.2225-9156 and 2225-9157) with 60 incoming lines for providing services to the HT consumers to address the supply or bill related queries / complaints in the quickest possible time.

7.3.3. HT Control Room

- There is a separate help desk at the Control Room to attend to complaints of HT consumers. Special teams comprising Distribution Engineers, Supervisors, skilled and unskilled persons are available round the clock at decentralised command stations to attend to HT faults in the distribution network.

7.3.4. LT Control Room

- The Company has a fully functional LT Control Room operated by Distribution Engineers to bridge the processes of Call Centre and Regional Reporting Centres for better management of consumer complaints and to ensure faster restoration of supply. Leveraging the advantages of automated metering of distribution transformers, geographical information system and smart network, this Control Room provides seamless connectivity between Call Centres, regional




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reporting centres and repair teams. Repair teams are deployed round the clock with vans fitted with wireless communication equipment, GPS devices, emergency restoration system and generator back-up.

7.3.5. Key Account Managers

The Organisation has in place “Key Account Managers” i.e. an Officer of the Company allocated as a dedicated Key Account Manager for bulk consumers, as their Single Point of Contact to provide them requisite assistance, as and when required. This initiative now covers quite a large number of consumers both from the HT & LT segments. The primary objective is to develop a mutually beneficial long-term relationship with the consumers.

7.3.6. Commercial helpdesk

- As an extension to existing Supply Call Centre, a Commercial Call Centre is also operating to provide end-to-end solutions to all commercial complaints. Consumer calls related to billing, metering and payment etc. are directed to the Commercial Call Centre from the Helpline Numbers for smooth and hassle-free service. Guidance on other value added services e.g. change of name, application for load enhancement due to installation of air-conditioner, etc. is also provided through this platform.




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- A Centralised Complaint Management Centre is also in operation as the back office of the Commercial Helpline. It ensures uniform and accurate resolution of commercial complaints from all over the licensed area.

7.3.7. Digital avenues for Complaint Handling

- Consumers can also report complaints through the website of the Company (www.cesc.co.in) as well as through e-mail, SMS, WhatsApp messaging, Facebook, Twitter, Instagram, LinkedIn and the Mobile APP.
- Support on Online processes is also provided to consumers through WhatsApp & pull SMSs. A special E-mail helpline exists for each Online process and all mails to these E-mail IDs are attended appropriately.
- **Chatbot- eBuddy:** CESC has launched its **Chatbot- eBuddy**, which is now live on CESC's Website (www.cesc.co.in) and Mobile App. This Chatbot assists consumers to avail a bouquet of E-Services and also handles various consumer queries, complaints and requests. It provides quicker and easier online solutions to consumers and makes interaction with CESC a hassle-free and delightful experience.
- **WhatsApp Bot:** CESC launched yet another digital service on WhatsApp in the third quarter of 2020-21, which is enabled with artificial intelligence and machine learning capabilities, to provide yet another




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convenient service platform for its Customers, especially in the pandemic situation. By sending a simple text message “Hi” to CESC’s WhatsApp number, Consumers can avail of services like view/download monthly bill, registering a complaint or checking its status, report supply disruption, access FAQs and avail entire range of e-services. Till 2020-21, it has received more than 15 lakh messages from around 66.65 thousand unique users.

7.3.8. Other Consumer 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 consumer issues. QMS, in the first step, helps in maintaining uniform workload distribution amongst various consumer-counters and thus results in speedy resolution of consumer issues. Consumer complaints are also registered and documented systematically through this process. Systematic documentation of consumer complaints / queries and analysis of captured data help in identifying the potential thrust areas in operation.
- Moreover, all the regional offices are now equipped to receive any consumer’s complaint irrespective of the consumer’s geographical location and the corresponding operational jurisdiction of a particular regional office in the consumer’s area of supply. Thus the regional




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offices are now operated in a 'boundary-less' manner extending services to all the consumers in CESC's entire area of supply. The Counters are now amalgamated so that each Counter provides all kinds of services. Counter Timings have also been adjusted to enhance customer convenience.

- 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', 'push notifications' and 'one-touch Complaint docketing facility'.

7.4. Grievance Redressal Forum

7.4.1. The Grievance Redressal Forum (GRF), constituted as per the Electricity Act, 2003, is functioning in accordance with the Regulations and information on its functioning is reported to the Hon'ble Commission. Also, communications regarding grievance redressal procedure are sent to the consumers through electricity bills and through Newspaper advertisements. Gist of the grievance redressal procedure and the names and official designations of the Grievance Redressal Officers (GROs), Central Grievance Redressal Officers (CGROs) and of the Ombudsman, along with their offices are also displayed on the Company's website.




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7.5. Meter reading and billing

7.5.1. The Company has implemented meter reading through hand held devices and as soon as the reading is recorded in the Tablet, the concerned consumer receives an SMS indicating the meter reading. This helps the consumers to keep track of their meter reading and consumption in a better manner.

7.5.2. Billing related activities are carried out following a structured schedule, starting from meter reading, generation of electricity bill and receipt of the same by a consumer so as to ensure adequate lead time from payment.

7.5.3. Vernacular billing options

CESC provides the option of getting electricity bills in vernacular languages (Bengali / Hindi) for all the consumers. To avail this facility, a consumer can either log into the Company's website or may even send SMS or WhatsApp message and seek the option of receiving the electricity bill in the desired language.

7.5.4. Digital services related to billing

- Bills are sent to consumers via e-mail immediately on generation of the same, if the consumer registers his/ her e-mail ID with CESC.




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- A variety of SMS services are provided to consumers. Information relating to scheduled meter reading date, reading details, Bill delivery date, payment of Security Deposit for Name Change of an Account, receipt of cheque etc. is communicated to the consumers through SMSs / emails on a regular basis.
- **Wondermail**, a Mobility Solution is operational for CESC's consumers. The Bill Generation SMS has been amended to include the special Wondermail Link, clicking on which a number of services like viewing and paying bills, regular updates on CESC's #LiveFreeBreatheFree Campaign, online payment options etc. are available.
- CESCAPPS, the mobile APP of the Company has an array of options like bill details including last payment details, bill payment options, E-bill registration, complaints' lodging, new connection application status etc.

7.6. Bill payment options

7.6.1. Cash offices

- The Company operates 40 cash offices for collection of payment from its consumers against electricity bills and other bills e.g. new connection, additional security deposit due to extension of load, reconnection of supply, prepaid recharge voucher etc. The Company




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also provides advance payment options and has arranged for cheque drop boxes at different locations across the licensed area.

- Card swiping machines at 16 Cash Offices are available for Walk-in consumers. Additionally a number of Payment Kiosks are in place at various locations where the consumers can pay their electricity bills.

7.6.2. Digital payment options

- As a part of the mass-movement towards creating a Digital India the Company has been pursuing their initiatives to enhance Digital Payments relentlessly. As a part of such initiatives, the Company has been introducing easy and user-friendly methods of online bill payments, with an array of options such as Multiple Mobile Wallets along with payments using Debit/Credit Cards, Net Banking, ECS, NEFT/RTGS, Auto Pay, Bharat QR & UPI.
- Pre-paid consumers have the option of generating the recharge vouchers online from the website. Consumers can also make Advance payment from the website and App.
- The Company always believes in creating extra-ordinary User Experience and for this purpose have started accepting Online Payments against various types of Bills since more than a Decade back. The Company has also taken multiple initiatives in this area to improve user experience like adding of Payment Gateways &



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Key Wallets such as Paytm, PhonePe, Amazon Pay and many others..

- This has not only improved the overall user experience but has also increased the Online Payment Penetration over the years and the Company is presently one of the leading Power utilities as far as court of Digital Payment is concerned. In this backdrop and with the greater Goal of improving the Online Payment penetration further up, the Company is continuously searching for new Online Payment Platform/Service for the Consumers and adding such options to their Digital Eco System.

7.7. Consumer engagement initiatives

7.7.1. Registration / Data Collection Process

- The Company provides multiple options to the consumers to register their e-mail id / mobile number / WhatsApp number with the Company.

7.7.2. Customer Outreach through digital modes

(a) CESC Baithaki Adda

- The CESC Baithaki Adda is conducted every year featuring eminent customers of CESC from various walks of life. In view of the pandemic situation during the year under review, keeping safety precautions in




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mind, the adda was streamed virtually conforming to the new normal situation. Best wishes for the festive season were conveyed to the CESC customers at the beginning of the adda by the senior leadership team followed by discussion and sharing of anecdotes by the guests on celebrations during the festive season in Kolkata, illumination of the city and CESC's role during the festive season. The virtual event was streamed Live on a Cloud platform as well as on CESC's Facebook and Youtube pages.

(b) Awareness Programme on Electrical & Fire Safety

- Electrical and Fire Safety Workshops were organized for Electricians, prior to Durga Puja & festive season. Electricians, Consumers and other Stakeholders were informed about the Workshop through a social media post across the various social media handles of CESC Limited, as well as through Emailer & SMS. The purpose of organizing the Electrical and Fire Safety Workshop was to spread safety awareness amidst everyone 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. Adjusting to the Pandemic situation, the Workshop was conducted on a virtual platform. Comprehensive & detailed Presentations on the topics were shared by




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Officers of the Company. The Event was broadcast through Facebook Live, Youtube Live & Cloud-based Webinar.

- A similar online workshop was conducted for HT Consumers. The purpose was to spread safety awareness amidst Consumers and to educate them about the best practices to reduce fire risks and the necessary measures to be taken in the event of a fire.

(c) Initiatives to promote Customer-Centricity inside the Organisation

- Bandhan – Customer Centricity Workshops are arranged digitally covering Officers of the Regional Offices where different ideas on customer centricity are discussed and information on CESC's latest initiatives are shared.

7.7.3. Consumer Communication through Digital Channels

- Apart from sending various e-mails throughout the year, the Company also communicates different initiatives to the consumers through social networking sites such as Facebook, Twitter, Instagram, LinkedIn & Youtube. Apart from resolving general queries, this provides a good interactive platform to connect with the consumers on a regular basis and keeping abreast of the issues raised by the consumers.




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7.8. Access to Useful Information

- 7.8.1. In adherence to the Regulations of the Hon'ble Commission, requisite information regarding new supply application, details of cash collection offices and their working hours, Grievance Redressal procedure etc. are displayed at important locations and on the company website.
- 7.8.2. Additionally, with the gradual deployment of the various e-services, CESC's corporate website has become a 24 X 7 virtual office, where a consumer can avail a bouquet of web services from the comfort of his home / office. The website provides various information to the consumers including Helpline Numbers, safety tips, power consumption guide, guidelines to the prospective consumers, details of District Offices and cash offices etc. The facility of downloading copies of electricity bills from the website is available for all consumers.
- 7.8.3. Details of consumption / payment history and security deposit details for the current and last few Financial Years of consumers are available on the website. Additionally, a consumption charge calculator has been incorporated, which enables the consumers to have an indicative idea about their monthly consumption charge with all the necessary breakups. HT consumers can view daily real time consumption, payment / contractual load history, security deposit status etc. upon registering.




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There are provisions for lodging complaints and reporting power theft through the website as well.

7.8.4. **#LiveFreeBreatheFree:** As a responsible Corporate Citizen, CESC has embarked on an initiative of contributing towards making the city of Kolkata and Howrah a cleaner and greener place to live in. In its endeavour to adopt clean fuel for transportation, CESC has already set up Electric Vehicle Charging Stations at major locations in the city and introduced Electric 2 & 4 wheelers in its operations. The Company has been encouraging consumers to embrace Clean Technologies in their daily household usage like Electric Cooking, Air Purifiers, Star rated Air Conditioners (AC), Geysers and Refrigerators. In view of rising air pollution, Electric Vehicles and Electric Cooking appliances are a much cleaner, safer and affordable energy option and the Company has been trying to develop Customer awareness in this regard to contribute towards making a greener city. Detailed presentations on these topics have also been uploaded to the Company's website for public viewing and awareness. Information on these initiatives are shared in all Customer facing events and meets.

7.8.5. The corporate website also provides facilities such as Application for transferring the CESC connection of the deceased consumer to the spouse's name, Advance Payment Statement, Multiple Bill Payment option, Online application for new supply connections and name change,



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Online application for additional load requirement for the purpose of installing Air Conditioners, Application for reconnection of supply, Change of mailing address etc.

- 7.8.6. CESC has rolled out the E-corner initiative with all in one desktop installed at the bill payment ATP kiosks for the consumers to avail the e-services available through the website. An additional Online Support help desk is operational to provide guidance to the applicants/consumers for using the online services. Information on web services is promoted regularly as well.
- 7.8.7. The Company sends regular messages through electricity bills as well as mailers / e-mailers to the consumers to make them aware of safety, online payment, grievance redressal forum, Company's new initiatives etc. New consumers are provided with an informative welcome kit with information on a host of features. Consumer booklets and handbooks are made available to enhance general awareness at different customer touch points. Further, the Company participates in popular radio and TV shows for disseminating consumer related information.
- 7.8.8. Based on customer feedback, cheque drop-boxes were placed at multiple locations in the city to facilitate payments. A special instructional video on online payment is also there to aid customers. Besides, regular communications were sent through SMS, e-mail, newspaper and TV advertisements regarding services during lockdown. It is also being

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submitted that, with the widespread devastation that Cyclone “Amphan” caused, the Company worked round the clock on a war footing to restore full power for 99% of its consumers within seven days.

7.8.9. During the Lockdown Period, CESC successfully maintained 24X7 stable Supply, and kept the Call Centre and Break-down Operations fully functional. Super Cyclone Amphan occurred on 20 May 2020, right amidst the nationwide lockdown during the first Covid-19 wave. The Company constantly updated consumers regarding changes in different processes through various communication channels like SMS, Email, Newspaper and TV Advertisements. A special instructional video on online payment was also created to aid 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 March 2007 signed between the generation and distribution divisions of the Company. The period under consideration posed significant challenges and adversities for the Company due to Covid-19 induced pandemic. Consumer demand was significantly suppressed during major parts of the year. Therefore, considering the best




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interest of the end consumers, Southern Generating Station was operated following appropriate economic dispatch in terms of merit order principle and associated technical issues. It is respectfully submitted that operation of conventional generating stations requires steady load and hence, frequent start-up – shut-down activities affect health and life of conventional plants. Keeping this in mind, operation of Southern Generating Station was undertaken to ensure continuous operation of the units for a minimum time period. Southern was generally not operated when prices in power exchanges were more favourable in the best interest of end consumers. Kindly refer to documents placed in Pages 84 to 86 of Volume 7 of the Petition submitted on 01.04.2022.

8.2. It is respectfully submitted that requisite metering infrastructure to comply with demonstration requirement were in place for the embedded generating stations of CESC since long. The practice of declaration of availability was also in place in terms of the applicable Regulations of the Hon'ble Commission. In the Order dated 30.07.2022 in Case No. B-36/ABT/9, the Hon'ble Commission held that, the availability submitted by CESC needs to be considered in absence of specific direction for demonstration of availability. Necessary availability details have been submitted in specified forms of this Petition. Arrangements for demonstration of availability in terms of the aforesaid Order are in place. Availability Certificates have also been issued by WBSLDC since July 2022. Accordingly, fixed cost of the

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embedded generating stations may kindly be allowed commensurate with their Plant Availability Factor in terms of the said Order dated 30.07.2022.

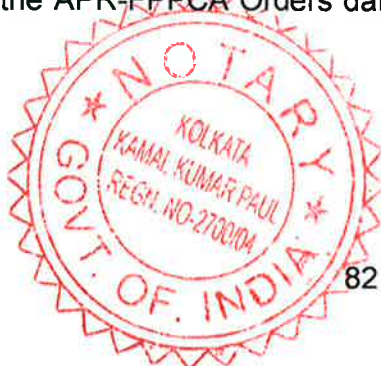
8.3. To meet the demands of the consumers of the Company, optimal utilisation of all available sources has been made (both long term and short term, from, inter alia, independent generators as well as the Traders, government portal and the Power Exchanges) following relative economics, in the best interest of the end consumers. 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 Regulation 7.5.1 of the Tariff Regulations. The Company has submitted the requisite documents to the Hon'ble Commission about the outcome of the competitive bidding process and the executed PPA. It is respectfully submitted that the Company faced difficulties in entering into Power Purchase Agreement based on competitive bidding during the initial part of the year. The same is already on the records of the Hon'ble Commission. Power was procured from this source under Regulation 7.5.2 and 7.5.6 of the Tariff Regulations during this initial part of the year. Necessary documents relating to the above have been placed in Pages 130 to 147 of Volume 5 of the Petition submitted on 01.04.2022. The Company obtains power on long term basis from own generating stations and HEL under an approved PPA, in terms of applicable Regulations / Orders of the Hon'ble Commission. The Company considered the cost, as certified by

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Auditor, based on the rates charged by HEL in terms of Order dated 27.11.2017 in Case No TP - 68 / 16-17 and 29.01.2016 in Case No. TP - 63 / 14 - 15 as Orders dated 08.09.2021 in Case No TP - 75 / 18 - 19 and the Order dated 20.04.2022 in Case No TP - 67 / 16 - 17 are under Appeal etc., as appropriate, adjusted for units received at CESC bus.

8.4. Power purchase cost also includes cost of short-term power purchase from supplemental sources (significant portion from energy exchanges) made in terms of the extant Regulations and applicable order to meet the requirement of power in CESC's licensed area. The Company has also procured power through banking which has been valued in terms of Regulation 5.15.2(iv) of the Tariff Regulations following the principle enunciated in the in APR-FPPCA Orders for 2015-16 (Case No. FPPCA - 79/16 -17 and APR – 58/ 16 – 17), for 2016-17 (Case No. FPPCA -85/16 - 17 and APR – 65/ 17 – 18) and for 2017-18 (Case No. FPPCA -93/18 -19 and APR – 73/ 18 – 19), all dated 01.08.2022 (hereinafter referred to as **“APR-FPPCA Orders dated 01.08.2022”**). Energy swapped in against swapped out energy of earlier years (2019-20) has been valued at the pooled power purchase cost of the respective years as per the principle adopted by the Hon'ble Commission in the APR-FPPCA Orders dated 01.08.2022. Accordingly, cost of swap-in energy, against energy swapped-out in 2019-20 has been considered as part of the power purchase cost in terms of the APR-FPPCA Orders dated 01.08.2022. Needless to mention

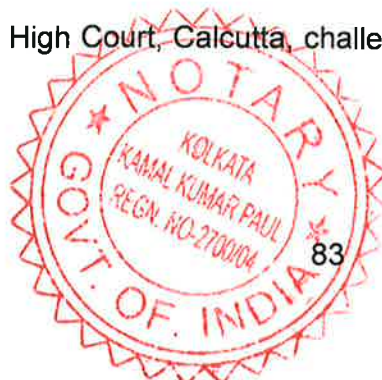



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that swap-out power cost was also evaluated and adjusted in line with the aforesaid APR-FPPCA Orders. Utilisation of banking (swap-in / swap-out) mechanism, in terms of the relevant regulations, helped the Company to fulfil its statutory universal supply obligation in an optimum manner in the interest of the consumers. CESC undertook swap-in / swap-out transactions keeping in mind usual market trend with respect to prices in power exchange. Due to unexpected price movement in power exchange driven by subdued demand due to Covid-19 imposed lockdown, economics of such transactions got affected. Kindly refer to the Appendix (Page 87 to 88 of Volume 7 of the Petition submitted on 01.04.2022). CESC has also procured power from power exchanges in terms of Regulation 7.4.4 of the Tariff Regulations. It is respectfully submitted that in terms of Regulation 7.5.5, no PPA is required for procurement through Power Exchange.

- 8.5. Injection/ generation from roof-top solar sources through net metering has also been considered, as directed by the Hon'ble Commission. CESC has also purchased solar and other non-solar renewable power through Green Term Ahead Market (G-TAM) to fulfil its RPO obligation. Through such mode of procurement, the Company has been able to achieve solar obligations completely and total obligations upto a significant extent.

A Writ Petition [WPA No. 19019 of 2021 : M/s Bengal Energy Limited & Anr. Vs. The West Bengal Electricity Regulatory Commission & Ors.] filed before the High Court, Calcutta, challenging the vires of the West Bengal




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Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) (First Amendment) Regulations, 2020 ("Amendment Regulations") was disposed of by a Judgment and Order delivered by the Hon'ble Justice Sabyasachi Bhattacharyya on 15.03.2022 wherein it was held that the said Amendment Regulations were ultra vires the Electricity Act, 2003 and the Tariff Policy, 2016. Subsequently, on the prayer of the Ld. Senior Advocate of the Hon'ble Commission, the operation of the Judgment and Order was stayed till 30.04.2022 to facilitate filing of an appeal. However, the operation of the Amendment Regulations was also stayed till 30.04.2022. By virtue of stay of operation of the Amendment Regulations, no further steps can be taken in terms thereof and consequently, as per legal opinion obtained by the Company, the unamended West Bengal Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) Regulations, 2013 continue to have effect and be in force (without any amendment). Similar stay has been granted by the Appeal Court in a pending appeal against the said judgment and the same is subsisting. Accordingly, power procurement from cogeneration sources, irrespective of nature of fuel remains eligible for RPO fulfillment. In this context, it is respectfully submitted that availability of renewable energy in West Bengal is a serious constraint as the State is not blessed with renewable energy generation potential. Situation for the Company is even more problematic as it operates within an urban area




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with extremely low possibility of generation of electricity from renewable sources. CESC has also procured power from cogeneration sources, to the extent available.

- 8.6. CESC has procured minuscule power from West Bengal State Electricity Distribution Company Limited (WBSEDCL) on emergency basis in terms of the relevant Order of the Hon'ble Commission and as per the approved rate of procurement. Sourcing of power from the available sources was optimised through the dispatch schedule, with due cognisance of technical and allied considerations as provided for under the relevant Regulations.
- 8.7. CESC suffers from the vagaries of an uneven demand profile inherent in the business of an urban distribution licensee where diurnal variations of demand are characteristically very high. In the year under review, the overall system demand was reduced due to the impact of Covid-19 imposed lockdown. While demand hovered around 1850 MW during summer peak, night lean demand slumps to around 300 MW during summer and was about 440 MW during winter. With such large variations in diurnal demand, relative economics is considered for deciding despatch schedule. Seasonal variations in demand add complexities to the problem. Improvement in capacity utilisation by optimally utilising the generation sources ensures benefits for the consumers through achievement of improved operational parameters. With such large variations in diurnal demand, the Company had to optimise the sources of power in consumer interest.




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8.8. As has been already mentioned earlier, fulfilment of demand and RPO of CESC's licensed area would depend to a large extent on external power purchase, both from long term and short-term sources, as there is hardly any possibility of any new generation sources being set up at close proximity to the load centres. To facilitate such power procurement from sources outside the licensed area, creation / augmentation of network is a pre-requisite for wheeling into CESC system.

8.9. Additionally, the Company has procured power from cogeneration sources regularly well within the price capped specified in the Regulations of the Hon'ble Commission for last few years.

8.10. Injection / generation from roof-top solar sources through net metering has also been considered by CESC, as directed by the Hon'ble Commission. The Company has effected net metering arrangements with 479 consumers having roof-top Solar (PV) sources as on 31 March 2021. Ground mounted solar PV system of 15 MW capacity has become operational under net metering arrangement in CESC licensed area. The Company has advised all existing and upcoming roof-top consumers to capture generation data and submit the same to CESC. Considering 16.13% Capacity Utilisation Factor, in terms of the Order dated 25 October 2021 (Case No. SM-28/21-22), generation from the roof-top sources is 53 MU in 2020-21. In the year 2020-21, 8 MU energy was injected from rooftop solar sources into CESC

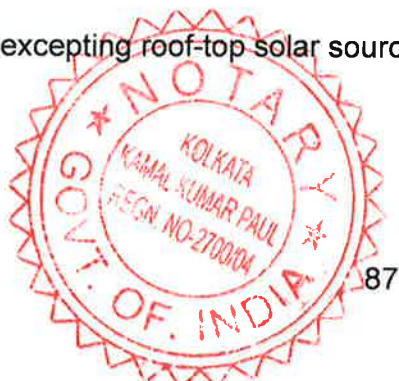



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system. It is expected that generation from roof-top solar sources will more or less fulfil the solar purchase requirement of the Company.

8.11. CESC requests all existing and upcoming roof-top consumers to capture generation data and submit the same to the Company. A suitable mechanism to record such generation data for onward submission to CESC is required towards fulfilment of its RPO compliance. Detailed submission of the Company regarding practical difficulties / challenges from roof-top solar is already in the records of the Hon'ble Commission. Connectivity agreements and net metering arrangements are in place as per provisions of the applicable Regulations of the Hon'ble Commission. For speedy facilitation, CESC has created a "Single-Point-of Contact" (SPOC) for all related queries and assistance. In order to assist the consumers, information relating to the key features of the net metering scheme, the eligibility criteria for setting up such sources and the contact details of the SPOC had been placed on the website of the Company (www.cesc.co.in). It is humbly submitted before the Hon'ble Commission that, the net metering arrangement affects power purchase cost and fixed cost recovery. Such mechanism also adversely impacts interest of small consumers.

8.12. While the Company is committed to comply with its obligation, it is apprehended that there is little possibility of extensive renewable sources coming up within the area of supply of urban distribution licensees like CESC (excepting roof-top solar sources). Though the state has potential in




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small-hydel and biomass generation, the areas of such projects are beyond the licensed area of the Company, and as such the distribution licensee(s) operating in such place(s) is / are at an advantageous position in tying up with such power for fulfilment of their own RPO. In order to meet RPO target, the Company may require to procure renewable power from outside the state due to lack of availability of such power within the state and the network capacity of the state and the Company may require enhancement for handling such power. The Company submits that due to inadequacy of renewable power in the state (less than 2% contribution from renewable sources), the licensees will be required to arrange such power from outside the state, as stated above, involving multiple levels of transaction charges and losses. Detailed studies are required to be undertaken to assess the impact of increased infirm power penetration on grid stability, conventional sources of generation, cost of grid integration and availability of adequate power transfer capability. Technology specific RPO targets is also a problem as in upcoming years the renewable energy capacity addition may change significantly. In view of these factors, the Company humbly prayed to Hon'ble Commission to keep the RPO targets unchanged in terms of the unamended West Bengal Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) Regulations, 2013.

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8.13. In spite of all efforts, the Company submits that poor availability of power from such sources, as opined by experts, is a reality. There is a scarcity of optimum sources of renewable energy in the state, barring small hydel projects and solar, which may be set up in the hilly terrain and the western part of the State respectively. The problem of non-availability of renewable / cogeneration power is even more pronounced for urban licensees like CESC. It is our submission that any Regulation / Order in this regard may kindly factor in the negative impact on consumer tariff of the Company. While the Company is committed to comply with its renewable purchase obligation, it apprehends that lack of availability in licensed area, difficulties in evacuation from outside this area and higher cost of such power might affect the consumers of the Company.

8.14. CESC has also procured power from West Bengal State Electricity Distribution Company Limited (WBSEDCL) on emergency basis in terms of the relevant Order of the Hon'ble Commission and as per the approved rate of procurement. Sourcing of power from the available sources was optimised through the dispatch schedule, with due cognisance of technical and allied considerations as provided for under the relevant Regulations. 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 FPPCA Petition submitted

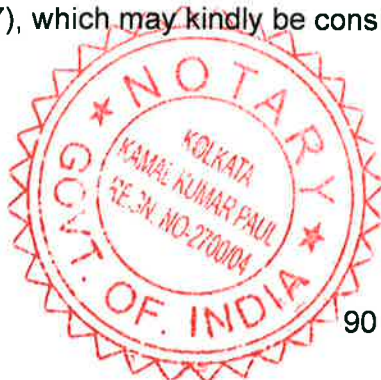



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on 01.04.2022 (Volume 5 to Volume 7), which may kindly be considered as part of this Petition.

8.15. Energy sold to persons other than own consumers and licensee (i.e. exported energy) has been valued at the system variable cost (power purchase and own generation sources) following principles enunciated in the APR-FPPCA Orders dated 01.08.2022. The valuation of export (except swap-out), following Hon'ble Commission's determination in APR-FPPCA Orders dated 01.08.2022, has been furnished at marginal cost equivalent to pooled variable cost of power including own generation of CESC, but excluding the power form renewable, cogeneration, hydro, power exchange and through short term open access. Swapped out energy settled during the year has been valued at the cost equivalent to the cost of corresponding swapped in energy within the year. Swapped out energy, to be settled in the subsequent year/s is valued at the pooled power purchase cost (other than banking power) for the year, following the principles enunciated in the APR-FPPCA Orders dated 01.08.2022.

8.16. Copies of Power Purchase Agreements / arrangements, details on swap-in / swap-out arrangements, procurement arrangements and Connectivity Agreements entered into with consumers having roof-top solar sources are also placed in the FPPCA Petition submitted on 01.04.2022 (Volume 5 to Volume 7), which may kindly be considered as part of this Petition.




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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.




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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 Platinum Award in Corporate – Thermal Power Plant Sector at Grow Care India Safety Awards 2020
- Budge Budge Generating Station received Platinum Award towards Excellence in Best Practices to Fight Against COVID-19 at Fame Excellence Award 2020
- Budge Budge Generating Station received Corona Warrior Award 2020 for Corona Protection Initiatives organized by Greentech




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- Budge Budge Generating Station received first prize in platinum category at 8th FICCI Quality Systems Excellence Award 2020
- Budge Budge Generating Station received Gold Award in Safety & Well-being at Workplace at 9th FICCI Safety Excellence Awards & Conference for Industry
- Budge Budge Generating Station received Certificate of Merit at BEE - National Energy Conservation Award (NECA) 2020
- Budge Budge Generating Station received Gold Award for outstanding achievement in Water Stewardship - APEX India Green Leaf Award 2019 for Water Stewardship organized by Apex India Foundation

9.6. Southern Generating Station

- Southern Generating Station received silver award at National Occupational Health & Safety Awards 2020 organised by Indian Chamber of Commerce
- Southern Generating Station received special Jury Appreciation on Prevention Strategy for Covid-19 at Workplaces organised by Occupational Health & Safety Expert Panel of India Chamber of Commerce



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- 9.7. CESC House has been recertified as "LEED Platinum" in November 2020 by US Green Building Council under Version 4.1 Dynamic Arc Platform
- 9.8. 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 2021 as submitted to the West Bengal Pollution Control Board, are enclosed in the Appendix (Page 259, Volume 4). 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 Company shall keep the Hon'ble Commission apprised of any development in this regard at material point of time.

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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 proposes to pass on benefits for other businesses undertaken by the Company. In this context, it is submitted, in terms of Tariff Regulations of the Hon'ble Commission, disallowance for excess distribution loss over the norms in distribution loss will be limited to Return on Equity and DSM charges receivable, to ensure realistic achievement of targets. However, in case of the Company, benefits commensurate with performance on distribution loss are proposed to be passed to the consumers through this Petition and through the FPPCA Petition for 2020-21, already submitted before the Hon'ble Commission appropriately 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.




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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.




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- 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 2020-21, under the Companies Act, 2013 are enclosed in "**Annex C1**" (Volume 3, Page 5).
- 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 2020-21, is placed in "**Annex C2**" (Page 200, 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 2020-21 in "**Annex C3**" (Page 204, Volume 3). Auditors' certificate relating to the number of consumers as on 31 March 2021, electricity consumption during 2020-21, the total connected load as on 31 March 2021 and revenue earned during 2020-21 under each tariff category has been placed in "**Annex C4**" (Page 208, Volume 3).




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11.7. Variable cost adjustment has been proposed in terms of the FPPCA Petition already submitted before the Hon'ble Commission under Regulation 2.8.7.2 of the Tariff Regulations. For such cost adjustment, 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 along with the FPPCA Petition and hence are not repeated here.

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 209, Volume 3).

12.2. The Company humbly submits that the capital expenditure is incurred 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 capital expenditure for the year at Rs. 418 crores. The Perspective Plan submitted before the Hon'ble Commission with the multi-year tariff application for the seventh control period has been broadly followed with necessary deferment and




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optimisation. 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.

12.3. In the MYT Order, the Hon'ble Commission did not consider any asset addition in the generation function of the Company and reduced the amount of asset addition for distribution function based on Compounded Annual Growth Rate ("CAGR") trend of distribution asset addition. Such methodology of determination of asset base resulted into reduction of Interest on loan, Depreciation and Return on Equity. It is respectfully submitted that the CAGR method for asset addition is not an appropriate method as the asset addition depends on load growth and future network development. Thus, asset addition is required to be evaluated through prudence check of the necessity of such addition; details of such addition and necessity having been submitted in this Petition and being in line with addition program as submitted in the MYT Petition for the seventh control period. In generation function, capex is incurred to meet various requirements under different capex programs such as, for replacement /

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refurbishment of boiler feed pump, cooling towers etc., for maintenance related jobs on turbine and other components, for ensuring safety and security, for adoption of new technologies and also to meet environmental requirements, which are not similar in nature. Moreover, it is humbly submitted that CAGR approach is applicable when there are similar items having no inter-se variations. 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 rather than CAGR approach is applicable. It is humbly submitted that the claims under such heads based on actual audited figures in this Petition are considered favorably by the Hon'ble Commission.

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

12.5. **Operation and Maintenance Expenses**

12.5.1. Regulated licensees are statutorily required to provide critical services, often under unfavourable circumstances in this country. They need to be



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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.

- 12.5.2. 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.




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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.

- 12.5.3. 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.




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12.5.4. 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.

12.5.5. 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 210, Volume 3) and voltage level-wise distribution line length has been placed in "**Annex C7**" of this Petition (Page 211, Volume 3), as directed by the Hon'ble Commission in the MYT Order for the fifth control period.

12.6. Employee Cost

12.6.1. 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 212, Volume




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3) and "**Annex C9**" (Page 213, 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.

12.6.2. It was the duty of the Company to ensure uninterrupted power supply to the essential establishments (hospitals, administrative offices, etc.) during the covid 19 pandemic and therefore it was incumbent of the Company to ensure full safety protocol of its employees and establishments. Medical expenses relating to Covid-19 are not specifically included in this Petition, other than hospitalisation and such expenses will be claimed in APR Petition of subsequent year, taking into consideration the expenses for first and second wave and employee vaccination together.

12.6.3. 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 214, Volume 3).

12.6.4. 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




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on a normative number for generation, it emanates that for the generating stations, the Company is entitled to full cost of employees worked out on the basis of the normative number of personnel. Thus, the employee number has been claimed on normative basis with both own employees and contracted manpower in terms of Regulation 2.5.5, Table 2.5.5-1, Schedule-9A, Item A., read with Notes x), xi) under Item A, Note iv) under Item B, 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 (Page 76, Volume 2 of this Petition). Relevant Auditors' Certificate on contractual manpower has been placed as "Annex C11" (Page 215, Volume 3) in this Petition.

12.7. Interest

12.7.1. During the year 2020-21, due to various global as well as domestic factors, specially due to pandemic, availability of capital and pricing thereof became extremely stringent, especially in the power sector. Certificates confirming the above rates are annexed to the APR Petition, (Page 199, Volume 5). Moreover, liquidity position and credit availability in power sector has deteriorated significantly. However, through considerable negotiations, the Company could manage to keep its interest rates well below the norm of "1 year SBI MCLR plus additional margin". The Company made necessary borrowings keeping in view the




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applicable Debt-Equity Ratio as per the Regulations for capital expenditure.

12.7.2. Through proper planning, deferment and optimisation, the Company could contain capital expenditure at Rs. 418 crores. Actual interest as incurred on loans has been prayed for.

12.7.3. Working Capital requirement has been furnished in the Petition and interest thereon has been prayed for on the basis of the actual contractual rate at mid year and substantially lower than the norm of "1 year SBI MCLR plus additional margin", confirmatory certificate on SBI MCLR is placed in this Petition (Page 18, Volume 5).

12.8. Temporary Accommodation

12.8.1. Necessity of funds by way of temporary accommodation partially arose due to pendency of finalisation of APR Orders for 2018-19 and 2019-20. Also, the shortfall arising for the current year 2020-21 necessitated temporary utilisation of short term borrowings and also funding requirements arising due to external factors which are being covered in terms of the Hon'ble Commission's Order dated 06.05.2020 in Case No. SM-22/ 20-21. Accordingly, Interest on such temporary accommodation has been incurred and prayed for. Interest has been arrived at considering the actual contractual rate on the average balance, which is significantly lower than the norm of "1 year SBI MCLR plus additional margin".




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Additionally, the Company has also separately claimed Interest on Temporary Accommodation availed for funding of Additional Levy and related holding cost, paid in respect of Coal Mine, which is under the consideration of Appellate Tribunal for Electricity (APTEL) Computation of interest on such temporary accommodation has been shown in Form 1.17(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-FPPCA matters for 2014-15 to 2017-18 and additional levy matter. The Company has prayed interest on temporary accommodation on the amounts under appeal.

12.9. Financing Charges

12.9.1. The Company has claimed Rs. 1087 lakhs as finance charges for 2020-21 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 continuout pursuit to control the cost of finances, benefit of which entirely goes to the




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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 2020-21, as directed by the Hon'ble Commission is enclosed as "**Annex C12**" (Page 216, Volume 3).

12.10. Fuel Cost

12.10.1. In terms of definition as provided in Regulation 1.2.1 (vi) read with 5.8.2 of Tariff Regulations, fuel cost comprises cost of basic content as well as associated transportation and handling / other incidental charge as applicable. Over past few years, price of coal has been increased by modifying different price components of coal. Apart from changing the basic rates, the monopoly supplier and transporter caused to increase the cost of coal, the primary fuel for power generation, through introduction / imposition of new charges, changing various components of coal price / freight and by enforcing new constraints / conditions etc. This price rise was further accentuated by imposition of taxes and levies. Relevant details have been furnished in the FPPCA Petition and therefore are in the records of the Hon'ble Commission. The same are not repeated herein to avoid prolixity.



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12.10.2. The Hon'ble Commission is kindly aware that multiple agencies are involved in the coal supply chain – the Coal India Limited and its subsidiaries, sampling agencies, Indian Railways and various other government agencies to name a few. The Company, in the interest of the end consumers and to ensure timely delivery of adequate quantity of coal, needs to maintain close liaising with these offices / agencies. Such activities are undertaken by Coal Handling Agents on behalf of the Company and the associated costs have been shown as "Handling, Sampling and such other similar Charges" in the applicable format. It is worthwhile to mention that in terms of the Tariff Regulations, handling, sampling and such other similar charges are a part of landed cost of fuel in terms of Regulation 1.2.1 (Ivi). Handling agents are normally identified through competitive bidding. Relevant supporting documents in adherence to the directives of the Hon'ble Commission in this respect, to the extent feasible and practicable are in the records of the Hon'ble Commission vide Petition submitted on 1.04.2022.

Coal handling agents provide host of services, which, *inter-alia*, includes co-ordination with supplier (ECL, BCCL, CCL or MCL as applicable) for ensuring smooth and continuous flow of rakes from sidings as per advice of the Company, supervision of loading, ensuring proper quality of coal, arrangement of sufficient tippers / trucks and manpower for supervision to ensure regular and smooth dispatches of coal supplies from colliery,




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release of delivery order, rake allotment, rake offering, indent placement, rake loading etc.

12.10.3. For captive coal, deductions of mining cost have been made in terms of the APR-FPPCA Orders dated 01.08.2022 and ultimately the price charged to the end consumers are in terms of the agreement with the Nominated Authorities. Needless to mention that, all levies / royalties / cess and other charges on coal are allowable in terms of various directions / notifications of competent authorities as also the APR-FPPCA Orders dated 01.08.2022 and accordingly claimed by the Company in accordance of the applicable Regulations. It is respectfully submitted that the Company, under applicable statutes, needs to pay GST to agencies engaged for mining, sizing, transportation, evacuation facility charge, washing, security, road repair etc. CESC was also required to pay GST at applicable rate on Reverse Charge Basis on Fixed Rate, Additional Premium, Royalty etc. A detailed note in this regard has already been placed in the Appendix in Page 179 to 210 of Volume 1 of the Supplementary Petition to FPPCA Petition for 2020-21 submitted on 29.09.2022. Relevant Auditor's certificates have been placed as "Annex C13" (Pages 217, Volume 3) and "Annex C14" (Pages 218, Volume 3) in this Petition. 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 113 to 134 of Volume 1 of the




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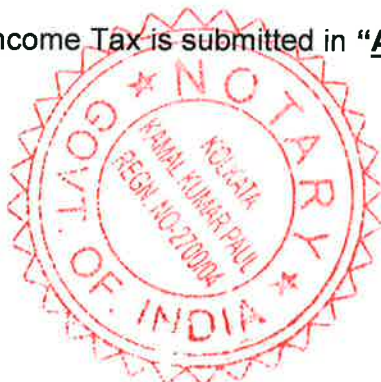
Supplementary Petition. Various requirements of the Regulations of the Hon'ble Commission have been adhered to in the coal procurement process including price therefor. It is respectfully submitted that duties, levies, cess etc. have been considered in terms of applicable statutes to arrive at cost of coal, duly certified by Auditors. Details of coal procurement and methodology for the same are furnished in the Supplementary Petition (Pages 220 to 226, Volume 1).

12.11. **Bad Debt**

12.11.1. Bad Debts for the year 2020-21 have been duly approved by the Board of Directors in its meeting held on 16 June 2021, through approval of the Annual Accounts of the Company. Relevant Auditors' Certificate is furnished in "**Annex C5**" (Page 209, Volume 3). The figure represents amount actually written off. In the Tariff Order dated 01.08.2022, 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.

12.12. **Income Tax**

12.12.1. Auditors' Report and Certificate for the actual payments on account of Income Tax is submitted in "**Annex C16**" (Page 220, Volume 3) and the




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amount is prayed for accordingly. The Company has received the Income Tax Order for the Assessment Year 2020-21 (Financial Year 2019-20) with a demand, which has been challenged by the Company in appropriate forum, the outcome of which is still pending. The Company's Income Tax Scrutiny Assessment for the financial year 2018-19 has not been taken up. Any Claims arising in respect of Income Tax, relating to the above year will be included in subsequent APR Petitions.

12.13. Reserve for Unforeseen Exigencies

12.13.1. 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. 19.50 crores has been ploughed back as directed. The Auditors' Report and Certificate in this respect is furnished in "**Annex C17**" (Page 224, Volume 3).

12.13.2. The Company has incurred expenses related to repair and restoration related activities as the super cyclonic storm Amphan which had damaged installations and infrastructures of the company severely. The Amphan damage expenses has not been claimed in this Petition in terms of Para 5.29 of the MYT Order dated 1 August 2022 and has been adjusted under Reserve for Unforeseen Exigencies. Relevant Auditors' Certificate has been placed in Page 246, Volume 3 of this Petition.




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12.14. Performance Based Incentive

12.14.1. 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.

12.14.2. *"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.




COMPANY SECRETARY
CESC LIMITED

12.14.3. The Tariff Policy issued under the aegis of the Electricity Act, 2003, also echoes the same principles.

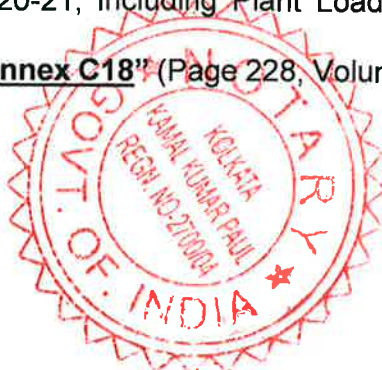
"5.0 GENERAL APPROACH TO TARIFF

5.11 f) Operating Norms

Suitable performance norms of operations together with incentives and dis-incentives would need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers. Except for the cases referred to in para 5.11 (h)(2), the operating parameters in tariffs should be at "normative levels" only and not at "lower of normative and actuals". This is essential to encourage better operating performance. The norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of equipment, nature of operations, level of service to be provided to consumers etc. Continued and proven inefficiency must be controlled and penalized."

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

12.14.4. The Auditors' Report and Certificate on details of generation for the year 2020-21, including Plant Load Factor achieved by CESC is placed in "Annex C18" (Page 228, Volume 3). Auditors' Report and Certificates on




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consumption details of coal and oil for the year 2020-21, are placed in "Annex C19" (Page 232, Volume 3). Relevant figures have been furnished in terms of Schedule-10 of the Tariff Regulations.

12.15. **Equity Base**

12.15.1. In terms of the Tariff Regulations and previous Orders, the closing equity base of 2019-20 as per the APR Petition of 2019-20 has been considered as the opening equity base for 2020-21 with appropriate functional allocation. The closing equity base for 2020-21 has been obtained from the opening equity base of 2020-21, considering additions during 2020-21. 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.

12.16. **Security Deposit**

12.16.1. 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




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CESC LIMITED

- 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 106, Volume 5).
- 13.3. As directed by the Hon'ble Commission, Auditors' Certificates with respect to demurrage details for 2020-21, break-up of legal expenses as included in profit and loss statement and relating to penalty / fine are furnished in "**Annex C21**" (Page 240, Volume 3), "**Annex C22**" (Page 241, Volume 3) and "**Annex C23**" (Page 242, Volume 3) respectively. The Company has preferred Appeals against the APR-FPPCA Orders for 2014-15 to 2017-18, Tariff Order dated 03.02.2022 in Case No : TP-77/ 18-19 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.

A blue ink signature of the Company Secretary.

COMPANY SECRETARY
CESC LIMITED

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. 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.

A blue ink signature of the Company Secretary.

COMPANY SECRETARY
CESC LIMITED

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 245, Volume 3) and relevant communications/ Orders have been placed in the Appendix (Page 128, Volume 5).
- 14.6. It is brought to kind attention of Hon'ble Commission that APR Petitions for 2018-19, 2019-20 and FPPCA Petitions for 2018-19, 2019-20, 2020-21 and 2021-22 are pending before the Hon'ble Commission, *inter alia*,

A blue ink signature of the Company Secretary.

COMPANY SECRETARY
CESC LIMITED

necessitating creation of temporary accommodation. Orders issued by the Hon'ble Commission in the past are yet to be fully recovered through tariff and any future Order allowing any sum recoverable by the Company, may be suitably considered in determination of the tariff along with the net aggregate revenue requirement prayed for through this Petition.

15. Prayers

15.1. It is most respectfully prayed that the Hon'ble Commission may be pleased to :

- (a) Confirm and approve the amount contained in Annex 1 as the allowable amount towards Annual Performance Review for the financial year 2020-21;
- (b) 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;
- (c) Allow additional amounts to the Company for any increase in power purchase cost beyond what has been considered in the Petition, if applicable;



COMPANY SECRETARY
CESC LIMITED

- (d) Early disposal of the Petition as the business of the Hon'ble Commission would permit;
- (e) 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



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CESC LIMITED



पश्चिम बंगाल पश्चिम बंगाल WEST BENGAL

28AA 697170

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 2020 - 21 in
terms of the Regulations of the
Hon'ble West Bengal Electricity
Regulatory Commission.



30 NOV 2022

5392

30 JUN 2022

নং.....

তাং.....

মোকাম- জয়নগর এ. ডি. এস. আর অফিস

জেলা- দপ ২৪ পরগণা

ক্রেতার নাম.....

সাক্ষর.....

মূল্য 20/-

ভেণ্ডার- মুনাল মিত্র

স্বাক্ষর

[Handwritten Signature]



AND

CESC Limited
CESC House
Chowringhee Square
Kolkata – 700001.

.....Petitioner

AFFIDAVIT

IN THE MATTER OF:

I, Jagdish Patra, son of Mr. Gajendra Nath Patra, aged about 52 years, residing at 4SW 5 Queen's Park, Kolkata - 700019, 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 authorized to swear this affidavit on behalf of applicant as I am competent to do so.
3. The statements made in paragraphs 1, 2, 3.1, 3.2.3, 3.2.8, 3.2.9, 3.3.1, 3.3.3 to 3.3.5, 3.4, 3.5, 4 to 8, 9.2 to 9.8, 10, 11, 12.1 to 12.13, 12.14.1, 12.14.4, 12.15 to 12.17, 13, 14 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.



✓

Deponent

Place: Kolkata

Date: 30th November 2022

Solemnly Affirmed & Declared Before
me on Identification of L.I. Advocate

KAMAL KUMAR PAUL, NOTARY
Govt of India, Regn No-2700/04

30.11.22

IDENTIFIED BY ME

P.G. Shaw
Enrolment No. F-692/663
Advocate

30 NOV 2022

POWER MAP OF CESC LIMITED

(AS ON 31.03.2021)

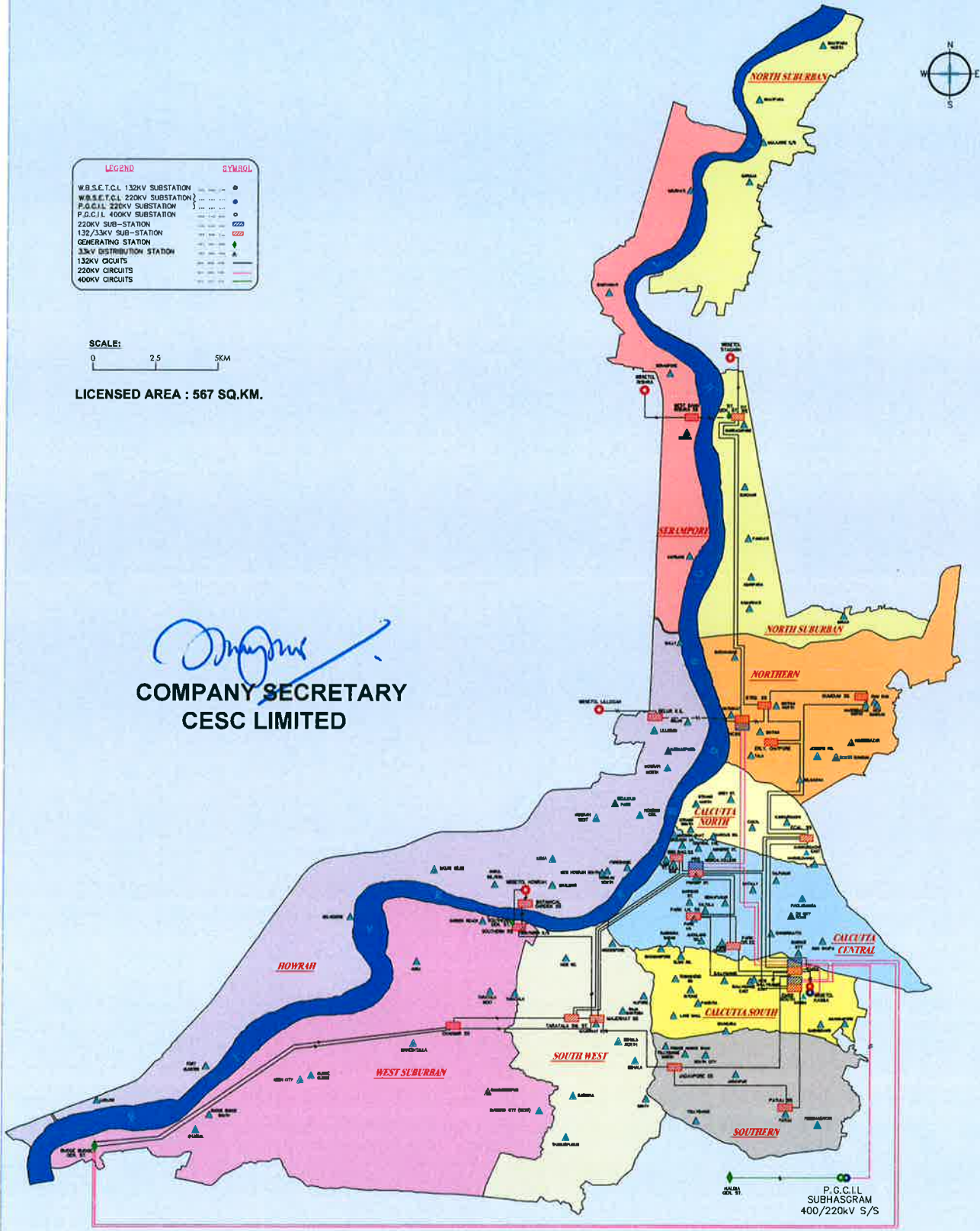
Attachment 1

LEGEND	SYMBOL
W.B.S.E.T.C.L. 132KV SUBSTATION	●
W.B.S.E.T.C.L. 220KV SUBSTATION	○
P.G.C.I.L. 220KV SUBSTATION	○
P.G.C.I.L. 400KV SUBSTATION	○
220KV SUB-STATION	○
132/33KV SUB-STATION	○
GENERATING STATION	▲
33KV DISTRIBUTION STATION	▲
132KV CIRCUITS	—
220KV CIRCUITS	—
400KV CIRCUITS	—

SCALE:
0 2.5 SKM

LICENSED AREA : 567 SQ.KM.

[Signature]
COMPANY SECRETARY
CESC LIMITED



P.G.C.I.L.
SUBHASKRAM
400/220KV S/S

Risk Analysis – Transmission vs. Distribution

Factors	Transmission	Distribution
Political Politicization of issues Dealing with several agencies Public Dealing Law & Order	<i>Practically No Risk</i>	<i>Severe Risk</i>
	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 Exposure to Market Fluctuations Recovery from Public Utilities	<i>More certain Contracted Contracted</i>	<i>Large collection risk Risky Very High Risk</i>
	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	<i>Higher Risk</i>	
	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	<i>More Risky</i>	
	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	<i>No Risk</i>	<i>High Risk</i>
	For Distribution, increased competition with the risk of loss of paying consumers, particularly with liberal provision for captive generation	
Operation and Maintenance Pilferage control Complexity of Operation/ Infrastructure Adverse non-controllables Manpower	<i>Practically Absent</i> <i>Less</i> <i>Absent</i> <i>Low</i>	<i>Very High</i> <i>More</i> <i>High</i> <i>High</i>
	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 Ease of Setting up of Network Right of way		<i>More</i> <i>Far more difficult</i> <i>Far more difficult</i>
	Reach of Distribution network up to consumers' doorsteps	
Off-take Placement in value chain Number of consumers Long term wheeling/ off-take agreements Take or pay Billing/collection process		<i>Complex Issues , more significant</i> <i>Far Higher</i> <i>Far Higher</i> <i>More Risky</i> <i>More Risky</i>
	Retail end of business requires additional effort; Universal Service Obligation not sufficiently backed up by take or pay; Payment uncertainty due to nature/ type / volume of consumers	
Extent of Regulation	Distribution is governed by Regulations of wider ambit with stricter penal consequences	

Distribution is prone to more risk on all factors.



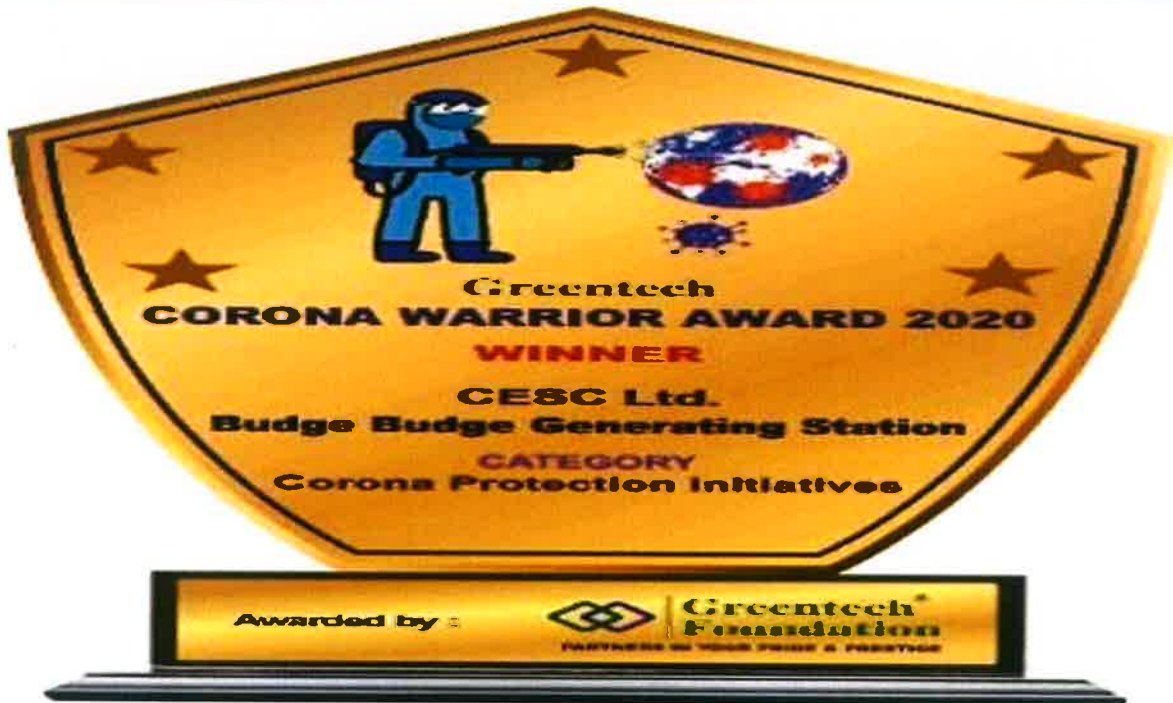
Budge Budge Generating Station received Platinum Award in Corporate – Thermal Power Plant Sector at Grow Care India Safety Awards 2020



Budge Budge Generating Station received Platinum Award towards Excellence in Best Practices to Fight Against COVID-19 at Fame Excellence Award 2020



Southern Generating Station received silver award at National Occupational Health & Safety Awards 2020 organised by Indian Chamber of Commerce



Budge Budge Generating Station received Corona Warrior Award 2020 for Corona Protection Initiatives organized by Greentech



Southern Generating Station received special Jury Appreciation on Prevention Strategy for Covid-19 at Workplaces organised by Occupational Health & Safety Expert Panel of India Chamber of Commerce



Budge Budge Generating Station received first prize in platinum category at 8th FICCI Quality Systems Excellence Award 2020

[Signature]
COMPANY SECRETARY
CESC LIMITED



Budge Budge Generating Station received Gold Award in Safety & Well-being at Workplace at 9th FICCI Safety Excellence Awards & Conference for Industry



Budge Budge Generating Station received Certificate of Merit at BEE - National Energy Conservation Award (NECA) 2020

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CESC LIMITED

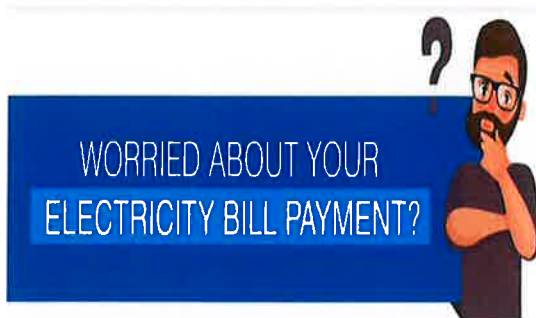


Budge Budge Generating Station received Gold Award for outstanding achievement in Water Stewardship - APEX India Green Leaf Award 2019 for Water Stewardship organized by Apex India Foundation



CESC House has been recertified as "LEED Platinum" in November 2020 by US Green Building Council under Version 4.1 Dynamic Arc Platform

Mahesh Ramarajan
COMPANY SECRETARY
CESC LIMITED



CESC BILL PAYMENT DEADLINES EXTENDED!

Bills having Due Dates between **March 22nd - 31st** are extended till **April 4th, 2020**

Use our 24x7 Online Channels to Pay or the drop boxes at the exit of the 26 Spencer's Stores in the City



CESC e-service posters

Signature
**COMPANY SECRETARY
 CESC LIMITED**

TIME TO BEAT THE HEAT WITH CESC!
Stay Home, Stay Safe
 Log on to www.cesc.co.in or Download CESC App or Call at 1912
HAPPY TO SERVE YOU

"Pay your CESC Electricity Bill - Online or by Cheque"

As your well-being continues to be our top priority, our Team is working 24x7 to provide you uninterrupted power supply even during this Lockdown.
 We would request you to pay your Electricity Consumption Bill Online & On-Time to avail Rebate & avoid Paying Late Surcharge.

Make payments through Cheque at Drop Boxes placed at-

- All CESC Regional Offices
- Serampore District Office
- Major Outlets of "Spencer's".
- Selected SBI & ICICI Bank Branches

For Details Refer to the Announcement Section on the Website
Be Safe - Take Care

Let's go green
OPT FOR E-BILL
 Log on to: www.cesc.co.in

Know Your Meter.
 Know Your Power Usage.
 Visit - cesc.co.in

CESC e-service posters

CESC MOBILE APP

ONE 'TAP' SOLUTION TO YOUR ELECTRICITY ISSUES

 **DOWNLOAD**

CESC APP TODAY

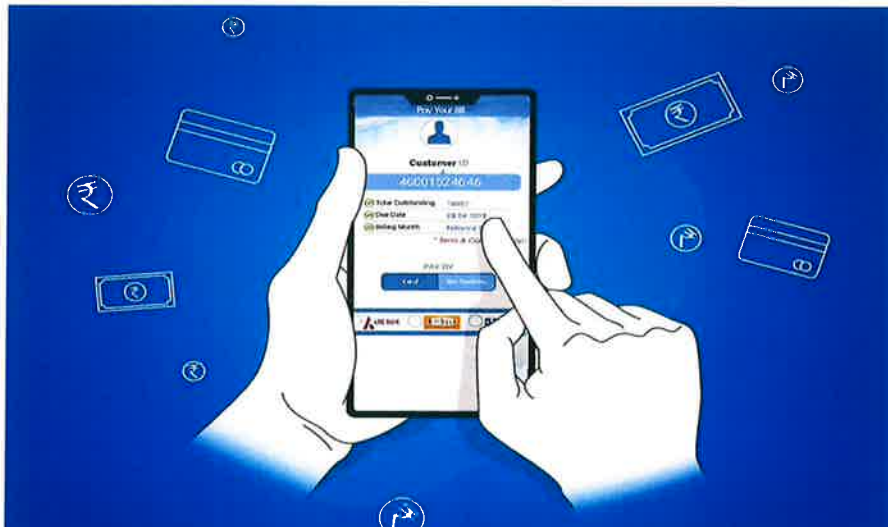
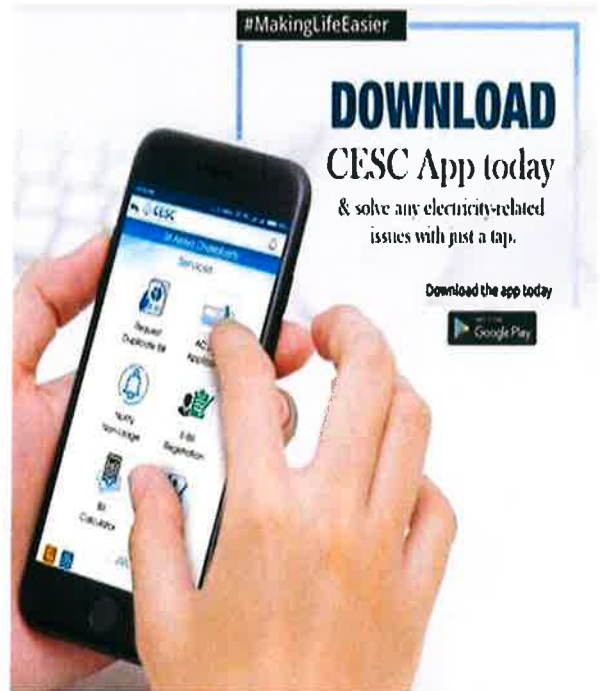


#MakingLifeEasier

DOWNLOAD

CESC App today
& solve any electricity-related issues with just a tap.

Download the app today



Pay Your Electricity Bill Online using

- NET BANKING • DEBIT/ CREDIT CARDS
- RTGS/NEFT • ECS • MOBILE WALLETS

CESC e-service posters

"Pay your CESC Electricity Bill - Online or by Cheque"

"Pay your CESC Electricity Bill - Online or by Cheque"

Consumers are Requested to View/ Download & Pay the Bill



Be Safe - Take Care

To know your latest Bill details & Due Date
Type CESC<space>BILL<space>Your
11 Digit Customer ID

and SMS us at 56070



Be Safe - Take Care

GOING TO
BANK OR ATM ?

Now You Can Now Drop Cheque For

CESC BILL PAYMENT

DROP BOXES

AVAILABLE AT THE SELECTED BRANCHES
Of SBI, ICICI & YES Bank

#ContinuingEssentialServicesinCorona

Consumer service initiatives

"Pay your CESC Electricity Bill - Online or by Cheque"

Keeping Safety considerations & Lockdown Guidelines for COVID-19 in mind, Meter-reading at site & Physical Bill delivery have become difficult.

In absence of Meter reading, we are raising Provisional Bills (as per Stipulations) & the same will be adjusted with due rate-slab benefit against the actual reading, when available subsequently.

Consumers are requested to View/ Download & Pay the Bill from the Link provided in the Bill Generation SMS or CESC Website (www.cesc.co.in) or CESC Mobile App(CESCAPPS).

For Bill details & Due Date, type-
CESC<space>BILL<space>Your 11 Digit Customer ID and SMS us at 56070.

Pay your bill Online using Debit/ Credit Card, Net-Banking, BharatQR, PayTM, PhonePe & Other E-Wallets, etc.

You can also pay through Cheque at Drop Boxes placed at locations provided below:-

List of SBI Branches:

Shyamnagar Garulla: West Ghoshpara Road, Noapara; Birati More: Kalabagan More; Dumdum: Jessore Road; Manicktala: APC Road; Entally: Girls Ch. Bose Road; Burra Bazar: MG Road; Nimtalla: Nimtalla Ghat Street; Howrah Maidan: GT Road; Sarenga: Howrah; Uttarpara: GT Road; Serampore: Hooghly; Bhowanipore: Ramesh Mitra Road; Taratala Industrial Estate: Taratala Road; Behala: Diamond Harbour Road; Garden Reach: South Eastern Rly Hq; Kidderpore: DH Road; Budge Budge: Mahatma Gandhi Road

List of ICICI ATM/Branches:

RN Mukherjee Road, Shyambazar Branch, AJC Bose Road

List of YES Bank ATM:

Dumdum: Lake Town; Dumdum: Nager Bazaar; Howrah: Bhajan Lal Lohia Lane; Ballygunge: Jhowtala Road; Bara Bazaar: Kali Krishna Tagore Street; Kakurgachi: P-253 CIT Road Scheme; Kasba: Bosepukur Road; New Alipore: 375-Block G; Prince Anwar Shah Road; Sarat Bose Road

List of CESC Offices:

South West Regional Office: Taratala; South Regional Office: Mandeville Gardens; Central Regional Office: CESC House; North Regional Office: Shyambazar; North Suburban Office: BT Road; Howrah Regional Office: GT Road (N); Serampore Office: Mahesh, GT Road

Drop boxes have been placed at all **27 SPENCER'S OUTLETS**.



Be Safe - Take Care

#ContinuingEssentialServicesinCorona

Help Us to Help You

Pay Your Electricity Bill Online & On-Time to help us operate safely & smoothly

Our essential service team comprising of Engineers, Technicians, Customer-Care & Administration Staff are working selflessly non-stop to provide uninterrupted Power supply to millions of Homes, Hospitals, Medical Stores, Banks & other critical Utilities to ensure smooth operation of medical services & essential supplies and to continue essential services during COVID 19.

We request all our Customers to opt for Digital modes of Bill payments through Website, Mobile App, E-Wallets, RTSG/NEFT & BharatQR in these testing times. These modes support instant payment and that too from the safe confines of your home.

Your online-timely bill payment will not only help us in ensuring best of services but also assist us in carrying out our operations safely & seamlessly.

Consumer service initiatives

**NOW LET'S
CHAT ON
WHATSAPP!!!**

Save **7439001912** and send Hi
to avail our services 24*7
on WhatsApp.

HAPPY TO HELP

For further queries, please contact us.

3501-1912/1912/4403-1912/1860-500-1912



Or scan the
QR Code
and send Hi

Now let's chat on WhatsApp!!!
Save **7439001912** and send Hi
to avail our services 24*7
on WhatsApp.

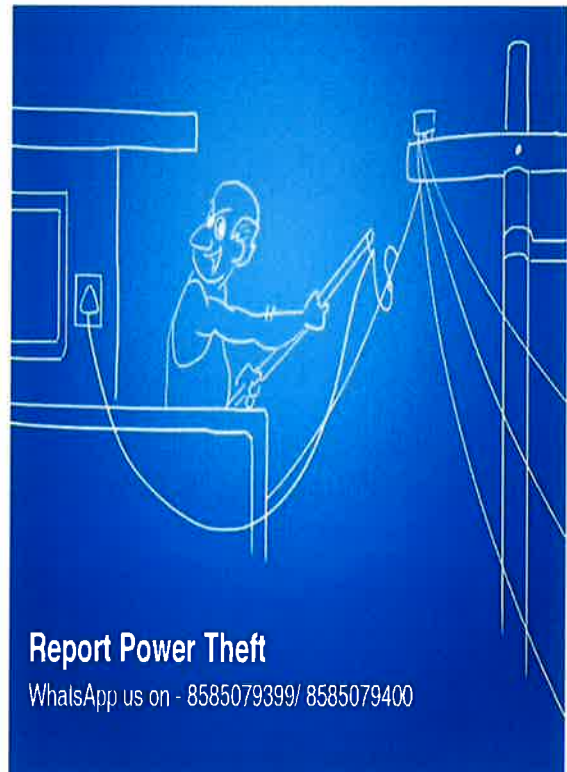
Consumer service initiatives



**Workshop on
Electrical &
Fire safety**

**Let us join hands and ensure
Electrical & Fire Safety for all**

26th March 2021 | 4pm onwards



Consumer service initiatives

Not all
Superheroes
Wear Capes,
Some Wear Masks Too.



#ContinuingEssentialServicesinCorona



Our Breakdown Repairing Team in Action
During the **LOCKDOWN**

#ContinuingEssentialServicesinCorona



Fighting 24x7 to keep the Power Supply Uninterrupted.
Even in the **LOCKDOWN**

#ContinuingEssentialServicesinCorona



Our Breakdown Repairing Team in Action
During the **LOCKDOWN**

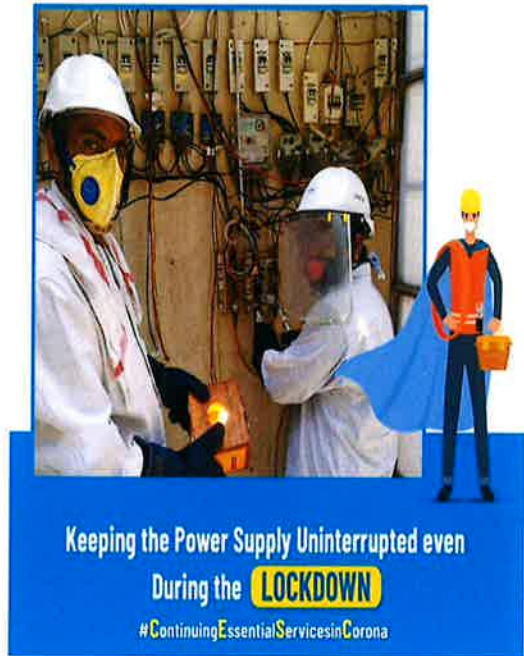
#ContinuingEssentialServicesinCorona

CESC service during lockdown due to Covid-19 pandemic


COMPANY SECRETARY
CESC LIMITED



Keeping the Power Supply Uninterrupted even
During the **LOCKDOWN**
#ContinuingEssentialServicesinCorona



Keeping the Power Supply Uninterrupted even
During the **LOCKDOWN**
#ContinuingEssentialServicesinCorona



Ensuring the Power Supply Uninterrupted even
During the **LOCKDOWN**
#ContinuingEssentialServicesinCorona



Ensuring the Uninterrupted Power Supply even
During the **LOCKDOWN**
#ContinuingEssentialServicesinCorona

CESC service during lockdown due to Covid-19 pandemic

**OUR TEAM IS READY FOR EVERY SITUATION!
EVEN IN COVID-19 LOCKDOWN**

REACH OUT FOR ANY ELECTRICAL
EMERGENCY DURING THE LOCK-DOWN

1860 500 1912 | 4403 1912 | 1912

#SayNaaToCorona

**KEEPING THE SUPPLY
UNINTERRUPTED IN EVERY SITUATION**

REACH OUT FOR ANY ELECTRICAL
EMERGENCY DURING THE LOCK-DOWN

CALL 1912

#ContinuingEssentialServicesinCorona

**Our Team Is Ready For Every
Situation! Even In COVID-19 Lock-Down**

Reach Out For Any Electrical
Emergency During The Lock-Down!

CALL 1912

#ContinuingEssentialServicesinCorona

**Our SUPERHERO on-ground
team is ready as always!
Even in this extended LOCK-DOWN**

Call us for any exigency.

1860 500 1912 | 4403 1912 | 1912

#ContinuingEssentialServicesinCorona

Consumer service initiatives during lockdown due Covid-19 pandemic

As per IMD, thunderstorm and lightning with light to moderate rainfall likely to affect over some parts of **CESC area today, 11th June, 2020.**

MONSOON SAFETY TIPS

During heavy rains and lightning, **SWITCH OFF ELECTRICAL GADGETS** and unplug them from the **WALL SOCKET.**

#CESCcaresforYou

Consumer service initiatives

RP-Sanjiv Goenka Group

CESC LIMITED

Join us for
CESC Baithaki Adda
with renowned
**Actors, Singers, Authors
& Celebrities**
18th October 2020 (Sunday)
7pm onwards

Adda Ebar **ONLINE!**

Watch us LIVE on FACEBOOK & YOUTUBE

[f / CESC Ltd](#) | [y / CESC Limited](#)

CESC Baithaki Adda online during the Covid-19 pandemic



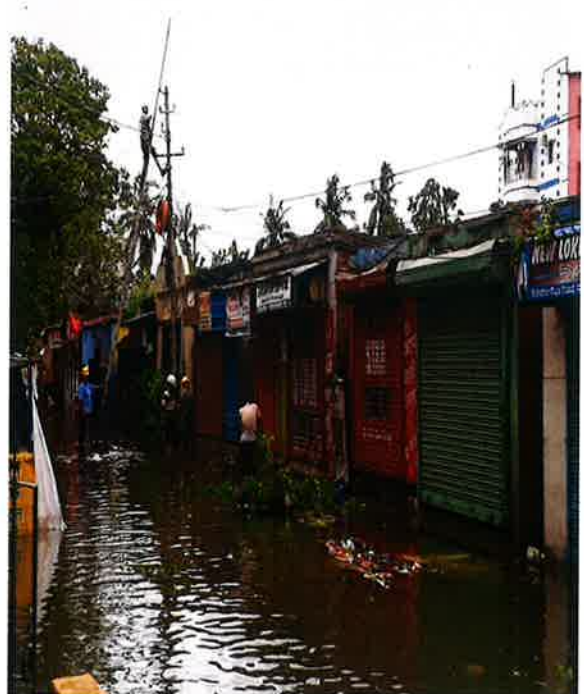
CESC's Online Electrical Safety Workshop for Electricians



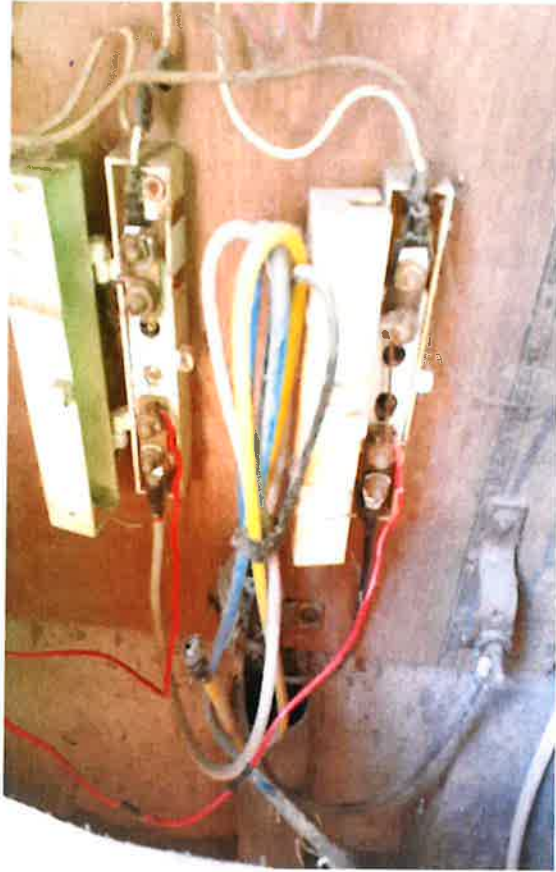
Initiatives by CESC Substations Department to join the Fight against COVID-19



Handing over of UV Sterilization Box to Administration Department to fight against kill the infectious germs in regularly used items, viz, papers, files, mobiles, etc.



Approach towards curbing theft of electricity



Hooking from Service Cut Out



Hooking removal from Meter Pillar Box



De-Hooking Drive - Nagerbajar

Approach towards curbing theft of electricity



De-Hooking Drive - Kamarhati



De-Hooking Drive - Kamarhati



New Connection Camp

Approach towards curbing theft of electricity