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**Cover**

The newly set up 220/132/33kV substation at Nonadanga on the Eastern Metropolitan Bypass, Kolkata. The substation will receive power from the 250 MW Budge Budge Unit III scheduled to be commissioned later this year.

## Board of Directors

Rama Prasad Goenka, *Chairman*  
Sanjiv Goenka, *Vice-Chairman*  
Pradip Kumar Khaitan  
Brij Mohan Khaitan  
Bhagwati Prasad Bajoria  
Birenjit Kumar Paul (*Nominee of Govt. of West Bengal*)  
Ajay Saraf (*Nominee of ICICI Bank*)  
Srinivasan Kothandaraman Vaidyanathan Srinivasan  
(*Nominee of IDBI*)  
Sumantra Banerjee, *Managing Director*

### Vice President & Company Secretary

Subhasis Mitra

### Auditors

Lovelock & Lewes

### Solicitors

Khaitan & Co.  
Sandersons & Morgans

### Registered Office

CESC House  
Chowringhee Square  
Kolkata 700 001  
Telephone : (033) 2225 6040  
Facsimile : (033) 2225 5155  
E-mail : cesc@cesc.co.in  
Website : www.cesc.co.in

### Bankers

ABN Amro Bank N.V.  
Allahabad Bank  
Andhra Bank  
AXIS Bank Limited  
Bank of Baroda  
Bank of India  
HDFC Bank Limited  
ICICI Bank Limited  
Industrial Development Bank of India Limited  
Indian Overseas Bank  
Punjab National Bank  
Standard Chartered Bank  
State Bank of India  
UCO Bank  
Union Bank of India  
United Bank of India  
YES Bank Limited

## Notice to Members

Notice is hereby given that the Thirty-first Annual General Meeting of the Members of CESC Limited will be held at CITY CENTRE, Royal Bengal Room, DC Block, Sector-1, Salt Lake, Kolkata – 700 064, on Friday, 24 July, 2009 at 10.30 A.M. for the following purposes :

1. To receive and consider the Profit & Loss Account for the year ended 31 March 2009, the Balance Sheet as at that date and the Reports of the Directors and the Auditors.
2. To declare Dividend.
3. To appoint a Director in place of Mr. B. M. Khaitan who retires by rotation and, being eligible, offers himself for reappointment.
4. To appoint a Director in place of Mr. B. K. Paul who retires by rotation and, being eligible, offers himself for reappointment.
5. To appoint Auditors and to fix their remuneration and for the purpose to consider and, if thought fit, to pass with or without modification, the following Ordinary Resolution:

“RESOLVED THAT the retiring Auditors, Messrs. Lovelock & Lewes, be and they are hereby reappointed Auditors of the Company to hold office from the conclusion of this Annual General Meeting until the conclusion of the next Annual General Meeting of the Company at a remuneration of Rs. 26,00,000/- payable in two equal instalments plus service tax and reimbursement of out-of-pocket expenses”.

### SPECIAL BUSINESS

To consider and, if thought fit, to pass, with or without modifications, the following Resolution :

#### 6. AS AN ORDINARY RESOLUTION

“RESOLVED THAT the consent of the Company be and is hereby accorded in terms of Section 293(1)(a) and other applicable provisions, if any, of the Companies Act, 1956 to mortgaging and / or charging by the Board of Directors of the Company (“the Board”) of all the immovable and movable properties of the Company, wheresoever situate, present and future, in favour of :

- a) Punjab and Sind Bank (PSB) for its term loan of Rs. 42 crore; and
- (b) Punjab National Bank (PNB), AXIS Bank Limited (AXIS), YES Bank Limited (YBL) for their respective shares of Rs. 25 crore, Rs. 15 crore and Rs. 15 crore in the working capital facilities extended to the Company by

the consortium of Banks and Standard Chartered Bank (SCB) for its incremental share of Rs. 10 crore in the said working capital facilities

to secure the said term loan and working capital facilities together with interests, charges, expenses, front-end fees and all other monies payable by the Company to PSB, PNB, AXIS, YBL and SCB (collectively referred to as “the said Lenders”) in terms of their respective Letters of Sanction, Loan Agreements, Facility Agreements, Hypothecation Agreements, Joint Consortium Agreements or any other Agreement or any amendment thereto entered / to be entered into by the Company with all or any of the said Lenders so that the mortgage and / or charge may be created by the Company in their favour, either singly or collectively, in such form and subject to such prior charges or with such pari passu or subservient ranking of charges as may be decided by the Board in consultation with one or more of the said Lenders.

AND FURTHER THAT the Board be and is hereby authorised to finalise and execute with all or any of the said Lenders all such deeds and documents for creating the aforesaid mortgage and / or charge and to do all such acts, deeds and things as may be deemed necessary for giving effect to the aforesaid Resolution.”

The Register of Members of the Company at Kolkata will remain closed from 11 July 2009 to 24 July 2009, both days inclusive.

Registered Office :  
CESC House  
Chowringhee Square  
Kolkata – 700 001  
22nd May, 2009

By Order of the Board

**Subhasis Mitra**  
Vice President & Company Secretary

### NOTES :

1. A member entitled to attend and vote at the meeting is entitled to appoint a Proxy to attend and vote in his stead. A Proxy need not be a Member of the Company. Proxies, in order to be effective, must be received by the Company not less than 48 hours before the time for holding the Meeting.
2. An Explanatory Statement pursuant to Section 173(2) of the Companies Act, 1956 in respect of the Special Business under item 6 is annexed hereto.

3. If the dividend as recommended by the Board of Directors is declared at the Meeting, it will be payable to those shareholders whose names appear on the Company's Register of Members, or, who are notified as beneficiaries by the Depositories viz. National Securities Depository Limited and Central Depository Services (India) Limited at the close of business on 10 July 2009.
4. Members holding shares in physical form may intimate the Company necessary particulars for ECS credit of the dividend directly to their bank accounts wherever ECS facility is available, or, for printing of their bank account details on the dividend warrants to prevent possibilities of fraud in encashing the warrants. For this purpose, members are requested to fill in the form appended to the Attendance Slip and send the filled in Form to the Secretarial Department of the Company latest by 10 July 2009. In respect of the shareholdings in demat form, any change in the Bank particulars should be intimated to the Depository Participants immediately so that the changed particulars may be used for dividend payment.

**PARTICULARS OF DIRECTORS WHO ARE PROPOSED TO BE REAPPOINTED AT THE MEETING ARE GIVEN BELOW:**

MR. B. M. KHAITAN is a renowned industrialist having interest in tea, batteries and engineering industries. Mr Khaitan has great contributions to the tea industry with which he has been associated for over five decades. He is the Chairman of Williamson Magor & Company Limited and Eveready Industries India Limited. He is a Director of Mcleod Russel India Limited, Babcock Borsig Limited, Jayshree Tea & Industries Limited (also Chairman of Remuneration Committee) and Phillips Carbon Black Limited. He is on the Board of Directors of CESC since 1994 and is a member of its Audit Committee. Mr. Khaitan does not hold any share in the Company.

MR B. K PAUL is Nominee Director of the State Government on the Board of Directors of CESC since 2002. A graduate in Electrical Engineering, Mr. Paul retired as the Managing Director of The West Bengal Power Development Corporation Limited (WBPDC) and is on the Board of Directors of WBPDC and Durgapur Projects Limited.

**EXPLANATORY STATEMENT PURSUANT TO SECTION 173(2) OF THE COMPANIES ACT, 1956 IN RESPECT OF ITEM OF SPECIAL BUSINESS SET OUT IN THE NOTICE CONVENING THE THIRTY-FIRST ANNUAL GENERAL MEETING OF THE COMPANY TO BE HELD ON 24 JULY 2009**

**Item No. 6**

The Company has availed of financial assistance of Rs. 42 crore from Punjab and Sind Bank (PSB) in order to refinance some of the costlier loans of the Company.

In addition, Punjab National Bank (PNB), AXIS Bank Limited (AXIS), YES Bank Limited (YBL) have sanctioned working capital facilities of Rs. 25 crore, Rs. 15 crore and Rs. 15 crore respectively while Standard Chartered Bank (SCB) has increased its working capital exposure to the Company by Rs. 10 crore (PNB, AXIS, YBL and SCB are hereinafter collectively referred to as 'the said working capital bankers').

The above loan and the above working capital facilities, in terms of their respective terms of sanctions, are required to be secured by mortgage / charge over the Company's immovable and movable properties in the form and manner required by PSB / working capital bankers.

The Ordinary Resolution set out under Item No. 6 of the Notice is for obtaining the approval of the Members in terms of the provisions of Section 293(1)(a) of the Companies Act, 1956 to enable the Company to create the aforesaid mortgage and / or charge. The Board of Directors of the Company recommends that the Resolution be passed.

None of the Directors is concerned or interested in the Resolution.

Registered Office :  
CESC House  
Chowringhee Square  
Kolkata – 700 001  
22nd May, 2009

By Order of the Board  
  
**Subhasis Mitra**  
Vice President & Company Secretary

## From the Chairman's desk

Dear Shareholder,

2008-09 was a tough year for the world economy. The first half witnessed the highest commodity prices over the previous century; the second half saw the biggest financial meltdown since the Great Depression. The Indian economy was also affected; liquidity dried up and industrial growth fell. The GDP shrank from 9.1% in '08 to 6.8% in '09.

In this difficult situation, your Company has increased both topline and profitability. CESC's sales revenue for '09 grew by 9% to Rs. 3,031 crore. Earnings before depreciation and taxation (EBDT) grew by nearly 12% to Rs. 640 crore and profit after taxes (PAT) increased by over 15% to reach Rs. 410 crore.

Let me share some highlights with you.

- ❑ Budge Budge and Southern, two of CESC's three pulverised fuel plants, are among the country's top ten power plants in terms of plant efficiency.
- ❑ CESC is one of the very few power utilities around the world that has earned Clean Development Mechanism (CDM) credits.
- ❑ New Cossipore, a sixty-year old generating station, still generates 445 MU of power during the 'peak demand' period – thanks to meticulous and innovative maintenance practices.
- ❑ Budge Budge, Southern and New Cossipore have been OHSAS 18001 certified. The three pulverised fuel plants generate zero water effluents – which has been recognised by the West Bengal Pollution Control Board.
- ❑ The new 250 MW third unit at Budge Budge is fast nearing completion; with this, the Company hopes to generate additional power for the consumer and reduce its dependence on outside sources.
- ❑ CESC has set up its first 220 kV / 132 kV substation; to optimise operational flexibility, it will be upgrading all its substations to 220 kV over a period of time.

- ❑ The Company is also rapidly progressing towards completing its 85 km long transmission line from Budge Budge.

CESC's generating stations are located mainly within the metropolitan area of Kolkata. With environmental concerns taking centre stage in thermal power generation, it is difficult to add capacity. We are, therefore, looking at installing power plants outside Kolkata – in West Bengal, Bihar and Jharkhand – through our associates and subsidiaries. We are also looking at ways and means to generate 'cleaner' and more environmentally friendly thermal power for our consumers.

Although the second half of 2008-09 was marked by a lower rate of growth, I see the downturn playing out by 2009, and the emergence of stronger growth in 2010. Therefore, I see a greater demand for power in the near future. I am confident that your Company will achieve healthy growth in the following years and generate greater shareholder value.

Let me thank all employees and associates for working so hard during the year and showing their unwavering commitment to the Company and to you, dear shareholders, for your support.

CESC and Kolkata have grown together for the last 110 years; and I am sure that we will grow together in the future as well.



22nd May, 2009

Dr. R P Goenka

## Directors' Report

The Directors have pleasure in presenting the Annual Report and Audited Accounts of CESC Limited for the year ended 31 March 2009.

### Financial Results

	(Rs. in Crores)	
	<u>2008-2009</u>	<u>2007-2008</u>
Earnings from Sale of Electricity	3,031.32	2,774.97
Other Income	168.27	155.37
<b>Total Income</b>	<b>3,199.59</b>	<b>2,930.34</b>
Profit before Depreciation & Taxation	639.77	571.36
Depreciation	(174.90)	(168.45)
Taxation	(55.18)	(47.55)
<b>Profit before transfer to Reserves</b>	<b>409.69</b>	<b>355.36</b>
<b>Profit brought forward from previous year</b>	<b>135.14</b>	<b>52.02</b>
Transfers		
Reserve for unforeseen exigencies	(15.58)	(12.89)
Debenture Redemption Reserve	5.13	(0.88)
General Reserve	(350.00)	(200.00)
Proposed Dividend @ Rs. 4 per		
Equity Share & tax thereon	(58.47)	(58.47)
Leaving a balance carried forward	<b>125.91</b>	<b>135.14</b>

### Performance Overview

During the year under review, the Company's earnings from sale of electricity increased by 9.2% over last year to reach Rs. 3,031.3 crore – This is the first time that CESC earnings have crossed the Rs. 3,000 crore mark - the overall increase in total income was also 9.2% (from Rs. 2,930.3 crore in 2007-08 to Rs. 3,199.6 crore in 2008-09). Profit before depreciation and taxation (PBDT) reflected a year-on-year increase of 12%. After providing for depreciation of Rs. 174.9 crore and taxation of Rs. 55.2 crore, the profit after taxes (PAT) for 2008-09 stands at Rs. 409.7 crore, which reflects a 15.3% increase over the PAT figure of the previous year amounting Rs. 355.4 crore.

A detailed review of operations for the year ended 31 March 2009 is given in the Management Discussion & Analysis (Annexure 'A'), which forms a part of this Report.

### Dividend

The Board recommends payment of equity dividend for the year ended 31 March 2009 at the rate of Rs. 4 per share on the paid-up equity share capital as on that date. The dividend is proposed to be paid to those shareholders whose names appear in the Register of Members of the Company, or appear as beneficial owners as per particulars furnished by the Depositories at the close of business on 10 July 2009. No tax on the said dividend will be payable by the shareholders - as required, the Company will pay appropriate tax thereon.

### Subsidiaries

CESC has six subsidiaries, namely, Spencer's Retail Limited and its two subsidiaries (Au Bon Pain Cafe India Limited and Music World Retail Limited); CESC Properties Limited and its subsidiary Metromark Green Commodities Private Limited and Haldia Energy Limited. The details of operations of these subsidiaries are given in the section titled 'Subsidiaries' in the Management Discussion & Analysis.

In accordance with the exemption under Section 212 (8) of the Companies Act, 1956 ('the Act'), the accounts of its above subsidiaries for the year 2008-09 are not attached. However, the said annual accounts will be made available to investors seeking such information. Copies of annual accounts of the above subsidiary companies will also be kept for inspection in the Registered Office of the Company and of the subsidiary companies also. The Company publishes Consolidated Financial Statements of the Company and its subsidiaries duly audited by Messrs. Lovelock & Lewes, Auditors, prepared in compliance with the applicable Accounting Standards and the Listing Agreements with the Stock Exchanges.

### Projects

In order to augment the availability of power in its licensed area, CESC is putting up a 250 MW unit (the third unit) at its Budge Budge generating station. The project is at an advanced stage of completion. The Company is also implementing a project that will enable it to bring power from the new third unit to its licensed area. The scope of this project involves erecting 85 kilometres of 220 kV double circuit overhead lines and some associated work. Though the Company faced some hurdles mainly involving Right of Way, your Directors are confident that the Company shall be able to complete this project at the earliest.

### Awards

During the year, your Company's Budge Budge Generating Station won the Green Tech Foundation 'Environment Excellence Gold Award'.

### Directors

In terms of provisions of Section 256, read with Section 255 of the Act and Article 102 of the Articles of Association of the Company, Mr. B. M. Khaitan and Mr. B. K. Paul, Directors, retire by rotation at the forthcoming Annual General Meeting and, being eligible, offer themselves for re-appointment. The necessary resolutions for obtaining approval of the Members have been incorporated in the notice of the forthcoming Annual General Meeting.

### Listings

The equity shares of your Company continue to be listed at the Bombay Stock Exchange (BSE), the National Stock Exchange (NSE), the Calcutta Stock Exchange (CSE) and the London Stock Exchange.

The Company has paid the requisite listing fee to the Stock Exchanges up to the financial year 2009-10.



**Directors' Responsibility Statement**

Pursuant to Section 217(2AA) of the Act your Directors hereby state and confirm that :

- i) in the preparation of annual accounts for the financial year ended 31 March 2009, the applicable accounting standards have been followed along with proper explanation relating to material departures;
- ii) appropriate accounting policies have been selected and applied consistently (except for a change in the treatment of voluntary retirement scheme cost, the impact of which is not material) and judgments and estimates have been made that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at 31 March 2009 and of the profit for the period from 1 April 2008 to 31 March 2009;
- iii) proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- iv) the annual accounts for the financial year ended 31 March 2009 have been prepared on a going concern basis.

**Corporate Governance**

A separate Report on Corporate Governance (Annexure 'B'), along with General Shareholders Information, as prescribed under the Listing Agreement with the Stock Exchanges, are annexed as a part of this Report along with the Auditor's Certificate.

**Fixed Deposits**

The Company has not accepted any deposits within the meaning of Section 58A of the Act and, as such, no amount of principal or interest was outstanding as on the date of the Balance Sheet. 902 deposits aggregating to Rs. 1.31 crore remained unclaimed as on 31 March 2009.

**Auditors**

Messrs. Lovelock & Lewes, Chartered Accountants, Statutory Auditors of the Company hold office till the conclusion of the forthcoming Annual General Meeting and being eligible, offer themselves for re-appointment. The Company has received a letter from the Statutory Auditors to the effect that their re-appointment, if made at the forthcoming Annual General Meeting, would be within the limits prescribed under Section 224 (1B) of the Act.

**Cost Audit**

Messrs. Shome & Banerjee, Cost Accountants, were reappointed to conduct the audit of the cost accounting records of the Company for

the year under review.

**Conservation of Energy, Research & Development, Technology Absorption, Foreign Exchange Earnings and Outgo**

The information relating to conservation of energy, research & development, technology absorption and foreign exchange earnings and outgo, as required under Section 217(1)(e) of the Act, read with the Companies (Disclosure of Particulars in the Report of Board of Directors) Rules, 1988 is given in Annexure 'C', forming part of this Report.

**Particulars of Employees**

The information as required in accordance with Section 217(2A) of the Act, read with the Companies (Particulars of Employees) Rules, 1975, as amended, is set out in an annexure to this Report. However, as per the provisions of Section 219(b) (iv) of the Act, the Report and the Accounts are being sent to all the Shareholders of the Company excluding the aforesaid information. Any shareholder interested in obtaining such information may write to the Company Secretary at the Registered Office of the Company. The said information is also available for inspection at the Registered Office during working hours up to the date of the Annual General Meeting.

**Industrial Relations**

During the year under review, industrial relations in your Company continued to be cordial. A detailed section on the Company's Human Resource initiatives is attached in the Management Discussion & Analysis.

**Acknowledgement**

The Board wishes to place on record its sincere appreciation for the continued assistance and support extended to your Company by its consumers, banks, vendors, Government authorities and employees. The Directors would also like to acknowledge with gratitude your encouragement and support during the year.

On behalf of the Board of Directors



**R.P. Goenka**  
Chairman

Kolkata, 22nd May, 2009

## ECONOMIC OVERVIEW

### The World Energy Outlook

Global primary energy needs are projected to grow at 1.6% per annum on an average between 2006 and 2030 – with the annual demand growing to 17 billion tonnes of oil equivalent. Although energy demand has slowed down during the past few months due to the global recessionary trends and high energy prices that were prevalent till the middle of calendar 2008, China and India are still the primary drivers of global energy needs, accounting for over half the incremental energy demand during this period. Though natural gas, among fossil fuels, has become the fastest growing energy source, coal is still the fossil fuel of choice, contributing to 41% of global energy needs.

Asia, led by India and China, has the fastest projected growth in electricity generation worldwide, averaging 4.9% annual growth from 2005 to 2030. Total electricity generation in Asian countries is expected to increase at an annual growth rate of 7.4%; by 2030, the region is expected to generate about 12.9 trillion kilowatt-hours.

Both India and China are heavily dependent on coal as the primary energy source for electricity generation. This has its own challenges. Carbon emissions, quality of coal, coal linkages and supply chain imperatives determine both locations of power plants as well as their generation efficiency. Thus, better power evacuation and minimising aggregated transmission and commercial (ATC) losses to generate greater efficiencies and cleaner power from fossil fuels become an area of focus.<sup>1</sup>

### India's Power Scenario

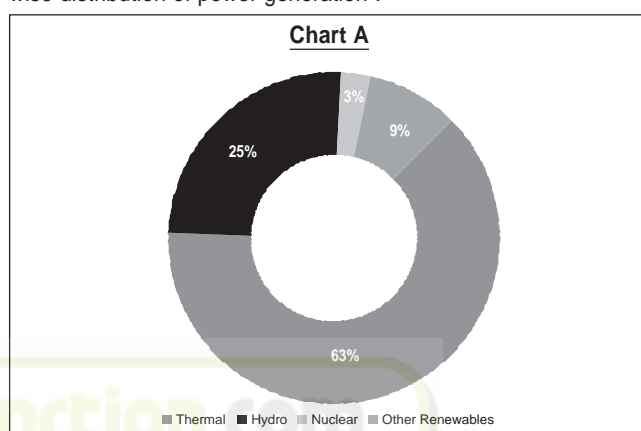
The electricity industry is governed by the Electricity Act, 2003, which came into force from 10 June 2003, with the objective of introducing competition, protecting consumer interests and providing power for all. The Act envisages transforming vertically integrated and monopolistic electricity utilities into competing service providers where the market would determine the cost of electricity. The Act advocates open access in transmission, phased open access in distribution, mandatory State Electricity Regulatory Commissions (SERCs), license free generation, mandatory metering and stringent penalties for theft of electricity.

Consequent to the Act, independent Regulatory Commissions have been constituted in the States as well as at the Centre. The Central Regulator has responsibility for generating plants owned by the Central Government, any other generating plant which may be delivering power to two or more States, and operators of inter state transmission lines, with jurisdiction over tariff they can charge for their services. All intra-state generating plants, transmission line operators and distribution licensees come under the purview of the

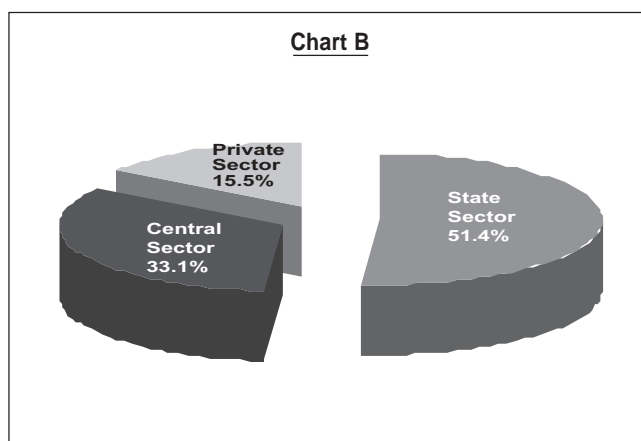
State Regulators. State Electricity Boards have been disaggregated into generating companies, transmission line operators and distribution licensees. Traders in electricity who envisage a pan India Operation need license to do so from the Central Regulator. Intra-state trading in electricity, however, is within the purview of the State Regulator.

### Generation

In 2008-09, India's total installed generation capacity was nearly 148,000 MW, of which an overwhelming 85% was generated by the central and state sectors. Chart A depicts the distribution of the generation by energy source, while Chart B illustrates the sector-wise distribution of power generation<sup>2</sup>.



There has been a significant generation growth over the past few years. From 2002-03 to 2008-09, power generation has grown from 543.4 billion units (BU) to 723.6 BU (Table 1). India's per capita power consumption is quite low - around 700 kWh - compared to the world average of 2,600 kWh. However, in spite of the increased generation capacity and low per capita consumption, the country still faces an average peak demand shortfall of 12%. It is estimated that if the power shortfall needs to be made up, total investment of the order of US\$ 200 billion would be needed during the next seven years.



<sup>1</sup> Source : Energy Information Administration, US Department of Energy, Energy Outlook 2008; International Energy Agency, World Energy Outlook, 2008

<sup>2</sup> Source : Ministry of Power



**Table 1 : Generation: Target vs. Achievement**

Year	Target BU	Achieved BU	% Achieved
2002-03	545.5	543.4	97.4%
2003-04	572.9	538.3	97.5%
2004-05	586.4	587.4	100.2%
2005-06	621.5	617.5	99.4%
2006-07	623.0	662.5	99.9%
2007-08	710.0	704.5	99.2%
2008-09	774.1	723.6	93.4%

Source : Ministry of Power

### Transmission

India has 265,000 circuit kilometres (ckm) of bulk transmission network, divided into five regions. The interconnected transmission system within each region is called a grid, with the national transmission system being the National Power Grid.

Government of India's 'Power for All By 2012' mission envisages 200,000 MW of generating capacity by 2012, which in turn, means that it becomes essential to rapidly augment both intra-regional and national level transmission capabilities.

### Distribution

India has approximately 144 million consumers. But large parts of the population are without electricity and substantial portions of those who are connected face power shortages, outages and voltage fluctuations. The distribution infrastructure in India suffers from high ATC losses, as much as 33%<sup>3</sup>, due to inefficient distribution infrastructure as well as pilferage. To combat this, Government of India has launched the Accelerated Power Development Reform Program (APDRP) to finance the modernisation of sub-transmission and distribution networks including a system of local management and energy accounting through widespread metering in every state utility's distribution circles.

### Operations

CESC is engaged in the business of generation and distribution of electricity within the licensed area of 567 sq. km in the city of Kolkata and adjoining areas and does not operate in any other reportable segment. The peak power demand in the licence area is now approximately 1,460 MW, which is met through CESC's internal generation capacities as well as through power purchased from the state and national grid. Power demand, however, fluctuates based on seasonality and the time of the day; the maximum demand for power is usually during the evening hours, with less power needs during rest of the day.

### Generation

The Company has four coal based generating stations – three pulverised fuel stations at Budge Budge, Southern and Titagarh and

the oldest, New Cossipore, which was commissioned in 1949. The combined generating capacity of these four plants is 975 MW.

**Table 2 : Details of performance of CESC's 'pulverised fuel' generating stations for 2008-09**

Generating Stations	Installed Capacity (MW)	Generation (MU)	Plant Load Factor (PLF): %
Budge Budge	2X250 MW	4,403	100.53%
Southern	2X67.5 MW	1,119	94.62%
Titagarh	4X60 MW	1,934	91.98%

Budge Budge, Southern and Titagarh generated at a combined Plant Load Factor (PLF) of more than 97% during the year under review. Budge Budge stands out in all parameters.

The said generating stations also excelled in the field of energy conservation by achieving extremely low auxiliary consumption. The pulverised fuel power stations of CESC are amongst the top power stations in the country on the basis of PLF – a proof of the generating efficiencies that the Company has created over a period of time.

### Budge Budge

Budge Budge, CESC's twelve year old generating station, has an installed capacity of 2 X 250 MW; a third 250 MW unit is being added and is at an advanced stage of commissioning. Budge Budge has earned several distinctions. It not only continued to operate at its full capacity for two consecutive years but also featured in the list of top ten thermal power stations in the country. Budge Budge has also earned recognition from the United Nations for its Clean Development Mechanism (CDM) status – a rare achievement for any thermal power plant in the world. The generating station has created a benchmark by overhauling a 250 MW unit in just nine days. Its excellent environment friendly status was acknowledged by Green Tech Foundation giving Budge Budge 'Environment Excellence Gold Award' during the year - the third consecutive year that the plant has won this award.

### Southern

Southern is the Company's eighteen year old power generating station, having being commissioned in 1991-92. In spite of its relative age, the generating station is at peak performance and is also featured among the most efficient operating power plants in the country. In 2008-09, Southern generated 1,119 MU of power at a PLF of 94.62%; this in spite of having to shut down for some time one of its units to undertake critical component repairs. The plant's efficiencies have also been improved upon, with the unit control system (DCS) undergoing a major upgrade in 2008-09.

### Titagarh

Titagarh is twenty six years old, having been commissioned in 1982-83. Usually, thermal power generating plants have an effective working life of around thirty years; beyond this, plant efficiencies become increasingly difficult to maintain. Titagarh, however, continues to deliver nearly 92% PLF, while generating over

<sup>3</sup> Source : <http://www.cstep.in/docs/power-sector-presentation.pdf>

1,900 MU of power. This is thanks to the meticulous maintenance programmes that CESC undertakes for each of its plants. During the year, Titagarh showed a marked improvement in specific oil consumption through tier blending of its coal input. Two other safety measures that the station has undertaken during the year deserve separate mention: (a) the installation of an auxiliary cooling tower; and (b) installation of variable voltage and frequency drives in the Induced Draft (ID) Fan of the boiler. Measures such as these have helped Titagarh reduce its auxiliary consumption. Plant shutdown time for overhauling has also been reduced significantly by modifications that have been carried out in the turbine cooling arrangement.

### New Cossipore

New Cossipore was commissioned in 1949 – nearly six decades ago. The fact that New Cossipore functions is in itself a remarkable feat. Yet, thanks to meticulous maintenance practices, New Cossipore continued to provide reliable support to the system during the peak hours. This sixty year old plant delivered 445 MU of power in 2008-09 during peak demand periods.

In recognition of its environment friendly and safe generating practices, all three pulverised fuel power stations have been awarded the Occupational Health & Safety Management System Certification (OHSAS 18001) certification.

### Distribution

CESC recently completed the setting up of its first 220kV / 132 kV substation – the Eastern Metropolitan substation, situated on the Eastern Metropolitan Bypass – which was formally commissioned on 16 May 2009. With this, CESC is ready to receive power from the third unit of Budge Budge generating station. The substation will ultimately have four 160 MVA 220/132/33 kV transformers, which will, on one hand, step down power to 132 kV level for onward transmission to various load centres and, on the other hand, meet the local area load through the 33 kV network. This marks the vital step towards upgrading the voltage to 220 kV; till now, the generating stations and load centre substations have been inter-connected at 132 kV. The substation will also be capable of state and central grid interconnectivity for better operational flexibility, reliability and stability of supply. The Company has also commissioned a voice, data and protection network for the entire transmission system using Synchronous Digital Hierarchy (SDH) equipment.

CESC's consumers number around 2.2 million. To cater to customer expectations of uninterrupted power supply, low or no voltage fluctuations, timely and accurate billing and convenient bill payment facilities, CESC has built a large and sophisticated distribution and customer service network across its licence area.

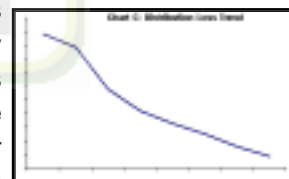
The distribution infrastructure comprises about 15,000 circuit kilometres of cable, 5,000 distribution transformers and a large number of switchgears. Investments are made on an ongoing basis to make the network stronger and more reliable; large sums have been invested during the year in the distribution infrastructure. In

order to facilitate quick location of faults and reduce the supply restoration time, a number of measures have been taken in recent times. Most significant of them is installation of around 1,600 Ring Main Units during the last two years at various strategic locations of the network that allow better maintenance of the network, early fault detection and repair. A program has been undertaken to suitably reinforce high-tension feeders that have been problematic in the past; also, 6kV feeders are being upgraded to 11 kV in order to reduce high-tension feeder tripping problems. CESC has around 2.5 million meters in the circuit and these meters are being gradually upgraded to superior quality meters.

On the consumer support side, senior officers of the Company are in regular interaction with selected consumers to seek their suggestions. Consumers are often reminded on telephone about any unpaid bills so that these may be regularised at the earliest. Consumers can also report incidents of fault through an upgraded tele-call system, which is available round the clock and covers the entire licence area; the call centre immediately logs the consumer complaint and expedites rectification. The bill payment system has also been simplified.

The Company has engaged Singapore Power, a world famous distribution utility, to advise the Company on measures for further improvement of its system reliability.

Distribution loss is an issue that has plagued power utilities for very many years. Apart from technical issues that contribute to these losses, the biggest component responsible for distribution losses is power pilferage and controlling this is a focus area for CESC. Efforts range from education to enforcement and, over a period of time, the Company's endeavours in this sphere have borne fruit (Chart C). These operations will continue in future.



### New Projects

The maximum demand for power in the licence area that CESC serves was around 1,460 MW during 2008-09; the Company's combined generating capacity is 975 MW. CESC imports the shortfall from other agencies. In order to reduce its dependence of import from other sources, CESC has been trying to increase its own generating capacity. As stated in the Directors' Report, a project to put up the third 250 MW unit at the existing Budge Budge Generating Station site is at an advanced stage.

Simultaneously, as stated in the Directors' Report, CESC is currently implementing a project that will enable it to evacuate power from the proposed third unit to its licensed area by erecting an 85 kilometre long 220 kV double circuit overhead line and other associated work.

The Company's subsidiary Haldia Energy Ltd. has decided to pursue a project for a 2X300 MW thermal power plant at Haldia in West Bengal. Opportunities for large thermal power projects in Jharkhand and Orissa are also being explored.