

## IV-B. CENTRAL ELECTRONICS LIMITED

### 1. INTRODUCTION

Central Electronics Limited continued to hold top position among other Public Sector Undertakings particularly in the field of SPV. The main operations of CEL were in the following areas:

- a) **SOLAR PHOTOVOLTAIC:** A major global and domestic player in the area of Solar Photovoltaic Cells, Modules and Solar Energy Systems by capacity enhancement and manufacturing higher wattage modules with special emphasis on use of thinner wafers with the aim to become price competitive in domestic and international market.
- b) **RAILWAY EQUIPMENTS:** Maintain leadership in the development, manufacturing, supply and commissioning of signaling and safety equipment to Indian Railways to meet their existing and emerging modernization needs as per their future strategies.
- c) **DEFENCE:** Using new technology and sub-assemblies for the supply of strategic components such as PCM to DRDO Labs., Ministry of Defence. Product portfolio in respect of PZT and Dielectric material for newer applications for BEL, NPOL, BARC and manufacturing of Heat Fuse for Ordnance Factory using sophisticated state-of-the-art technology.
- d) **SAFETY & SECURITY:** Diversify in the area of Security Systems and equipment to counter terrorist threats in India by way of

commercializing the latest state-of-the-art technology from abroad.

### 2. PERFORMANCE IN 2009-10

#### 2.1 Operating Results

Production, Sales and Profit/Loss achieved during the year as compared to the previous year are given below.

(₹ in crore)

	2009-10	2008-09
Production	123.54	155.26
Sales	114.52	146.06
Net Profit before Tax	0.62	3.69
Net Profit carried forward to Balance Sheet	0.12	1.29

#### 2.2 Exports

During the year, total exports of the company were ₹10.54 Crore as against ₹14.07 Crore in previous year.

#### 2.3 Major achievements of CEL during 2009-10

- Solar Modules up to 160 Wp test qualified to International Standards of IEC 61215 (II Edition) and IEC 61730 (part I & II) by TUV Germany.

- ◆ Designed & developed 250 Wp Solar PV Modules.
- ◆ 17% efficiency achieved on R&D scale & 14-15% on volume production in Solar Cells.
- ◆ Entered into a MoU with Darfur Reconstruction & Development Fund (Govt. of Sudan) valued US\$ 10 million for Solar Electrification.
- ◆ Received order for electrification of 20 villages in Guinea Bissau valued US\$ 1 million leading to generation of significant future business.
- ◆ Multi-section Digital Axle Counter (40 detection points) conforming to European standard CENELEC SIL-4 has functioned without any failure for more than 3 months under joint evaluation with RDSO & Northern Railway. The third party software validation etc. was under process.
- ◆ Design & development of Point Zone Digital Axle Counter had been completed and the prototype model was in advance stage of completion.
- ◆ Enhanced Production Capacity to Manufacture Phase Control Modules (PCM) to 30,000 Nos. per year.
- ◆ The order for 24000 nos. of Phase Control Module (PCMs) valued `30 crore received from BEL for four BLR (Battery Locating Radar) for Air Force.
- ◆ Obtained type approval of Piezo Generator for Heat Fuse 551 from FFV, Sweden and subsequently received an order of 10500 nos. from Ordnance Factory, Khamaria, Jabalpur.
- ◆ Up scaled the crystal growth facility of CZT Crystals by installing new furnaces and other equipment to produce 300 crystals per annum.

### 3. PERFORMANCE IN 2010-11

#### 3.1 Performance Data

(₹ in crore)

	2010-11 (Nov.)	2009-10 (Nov.)
Production	59.59	49.96
Sales	74.15	47.73

#### 3.2 Exports

During 2010-11, exports have been `9.22 Crore (till Nov.) as against `7.49 Crore in 2009-10 (till Nov.).

### 4. FUTURE STRATEGY

- ◆ Development, Fabrication and Characterization of Rear Surface Passivated High Efficiency Screen Printed Selective Emitter Solar Cells.
- ◆ Expansion of manufacturing capacity of PCMs to produce 30,000 to 40,000 Nos. per year.
- ◆ Development of Universal Fail Safe Block Interfacing (UFSBI) Equipment
- ◆ Upgradation of manufacturing and testing facilities of Piezo Generators and Elements (on going project).
- ◆ Source and acquire technology to manufacture PCU and Micro Invertors.

### 5. FOREIGN EXCHANGE RECEIPTS AND OUTGO

During the year 2009-10, the company spent `19.13 Crore in foreign exchange.

The company earned foreign exchange worth `10.54 Crore during the year 2009-10.

### 6. ENERGY CONSERVATION

The company being an electronic industry, its operations are not energy intensive. However, the company frequently evaluates its processes and plant & machinery to economize on the energy consumption. To reduce the power consumption, conventional tube lights and bulbs have been replaced with CFL. It has done redistribution of the leads in Solar Photovoltaic plant so as to make optimum use of its captive DG sets.

More than 1,000 poplar plants have been planted. A nursery of poplar plants has been set up to provide saplings for further plantation next year. Thus the company is putting in efforts towards improvement of environment.



## 7. PARTICULARS OF EMPLOYEES

In accordance with the Companies (particulars of employees) Rules 1975 read with Sub-section 2-A of Section 217 of Companies Act 1956 as amended in 1988, none of the employees of the Company either employed throughout the year or for a part of the year under review was in receipt of remuneration more than minimum prescribed in the Rules.

## 8. IMPLEMENTATION OF HINDI, INDUSTRIAL RELATIONS & HUMAN RELATIONS

The company had very cordial industrial relations during the year. The management also initiated programmes for upgrading the skills of employees.

In order to ensure the use of Hindi, the employees

continued to be trained in Praboth, Praveen, Pragya Hindi Courses, Hindi typewriting and use of Hindi Computers. Hindi week was organized from 14.09.2009 to 21.09.2009. Various short time training programmes and workshops were conducted for workers and officers during the year.

Special workshops and various competitions in Hindi were organized and awards distributed to the winners.

## 9. WELFARE OF RESERVED CATEGORIES

All Government directives relating to the reserved categories such as Scheduled Castes, Scheduled Tribes, Physically Handicapped, Ex-servicemen etc. continued to be implemented during the year. Total number of employees in these categories was 183, which represents about 28% of the total strength of the company as on 1st November, 2009.