

IV B. CENTRAL ELECTRONICS LIMITED

1. INTRODUCTION

Central Electronics Limited (CEL) holds a unique position among the family of Public Sector Enterprises in Electronics, with its emphasis on indigenous technology inducted from its in-house development and the national laboratories. Activities of CEL are focused on three areas:

- ☛ Solar Photovoltaic cells, modules and systems for a variety of rural and industrial applications.
- ☛ Selected Components & Systems in the field of Strategic Electronics
- ☛ Selected Electronic Systems for Railway Safety and Signalling and Impressed Current Cathodic Protection of oil and gas pipelines

2. PERFORMANCE IN 2002-03

2.1 Operating Results

Production, sales and profit/loss achieved during the year as compared to the previous year are given below:

(Rs. in crores)

	2001-2002	2002-2003
Production	72.77	68.10
Sales	70.83	65.59
Operating Profit/Loss	(-) 0.08	(-) 1.86
Loss carried forward to Balance Sheet	(-) 4.75	(-)

2.2 Exports

Solar Photovoltaics Group: During the year,

total exports of the Company was Rs.8.32 crores as against Rs.3.51 crores in the previous year recording a sharp increase of 137%.

2.3 Other Highlights of 2002-03

Technology

The PV market across the world is moving into overdrive through innovative product development. The company has also invested in R&D efforts to develop Building Integrated Photovoltaic (BIPV) modules, requirement for which is expected to grow dramatically over the next few years. Product offerings from multiple process technologies to reduce overall cost of production will be a key issue over the next years.

Through in-house R&D work, CEL was able to develop/upgrade a number of processes and technologies some of which are as follows:

The R&D project on Digital Axle Counter initiated at CEL jointly with DSIR and Railways is the first project in India where Railway signalling and safety product is to be designed as per CENELEC SIL-4 Safety Standard involving not only the fail safety aspect but also highest level of reliability and availability.

The single section version of the product has been approved by RDSO and is being introduced in Railways. Development of multi-entry digital axle counter has been completed and is ready for submission to RDSO for approval.

Business

In the field of SPV, the company has executed a

number of export projects. Some of them are: (a) solar electrification of 'Tayrona National Natural Park' situated near 'Santa Marta' in Columbia, South America, (b) solar electrification of four remote villages in Nepal, (c) solar electrification of a remote village in Myanmar, (d) export of SPV products worth USD105,259 to the Philippines, and (e) export of SPV products worth USD 429,150 to Zambia.

The company manufactured, supplied and installed a 30 KW capacity SPV power plant at the Taj Mahal Complex to provide uninterrupted and pollution free power to the 'Air Pollution Monitoring Laboratory'.

In the field of Electronic Systems, CEL obtained RDSO approval for its state-of-the-art equipment the Digital Axle Counter (DAC). Some trial numbers were supplied to Railways.

In the field of Components, the company developed special ferrite core types PM-50, PM-62 and PM-74 for Sonar project of NPOL. For NPOL, the company undertook successful development of piezo electric devices. It has resulted in orders worth Rs.100 lakhs during 2003-04. During the year, the company received orders for 14,382 nos. of CES and supplied 10,000 nos. of CES to OFK, Jabalpur.

The Company has received ISO 9001:2000-QMS Certification in recognition of establishment and maintenance of Quality Management System from STQC Certification Services (Ministry of Information Technology) accredited by Dutch Council for accreditation in respect of (i) Electronic Ceramics, (ii) Systems Divisions, (iii) Professional Ferrites and (iv) Solar Photovoltaic.

2.4 Future Strategy

During the tenth five year plan, CEL plans to upscale and upgrade production facilities of

Solar Photovoltaic Group to achieve installed capacity of 10 MWp per annum. Such upscaling efforts are expected to bring about true turnaround of the company's operations. The company has approached the Government for financial assistance through equity/loan investments and support for R&D in this regard.

In the area of Electronic Systems, development efforts will continue for designing and production of other signalling and safety equipment for deployment in Railways.

The Microwave Electronics Division will gear up to meet the volume demand for strategic items in Phased Array Radar related applications.

Take-up regular commercial production of Cadmium-Zinc-Telluride (CZT) substrates for which a pilot manufacturing plant has just been completed. It is in technical tie-up with SSPL, Delhi.

3. FOREIGN EXCHANGE RECEIPTS AND OUTGO

During the year 2002-03, the company spent Rs. 1620 lakhs in foreign exchange as against Rs.1323 lakhs in the previous year towards the purchase of capital equipment, raw materials & components, travel etc.

The company earned foreign exchange worth Rs.76 lakhs as against Rs.42 lakhs in the previous year from export of its products.

4. 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 economise on the energy consumption. It has done redistribution of the loads in solar photovoltaics plant so as to make optimum use of its captive DG sets.

More than 1000 poplar plants have been planted. A nursery of 1500 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.

5. PARTICULARS OF EMPLOYEES

In accordance with the Companies (particulars of employees) Rules 1975 read with Sub-Section 2-A of Section 217 of the 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.

6. 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 Prabodh, Praveen, Pragya Hindi Courses, Hindi typewriting and use of Hindi Computer. Hindi week was organized from 14.9.2002 to 20.9.2002. Various short time training programmes and workshops were conducted for workers and officers during the year. Special workshops on 'Noting and Drafting' and various competitions in Hindi were organized and awards distributed to the winners.

7. 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 were 195 which represent about 27% of the total strength of the Company as on 31.3.2003.